

# THE ARMY'S CORE COMPETENCIES

A Monograph

by

Major Richard E. Dunning  
United States Army



School of Advanced Military Studies  
United States Army Command and General Staff College

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MONOGRAPH APPROVAL PAGE

Name of Candidate: Major Richard E. Dunning

Monograph Title: The Army's Core Competencies

Approved by:

\_\_\_\_\_, Monograph Director  
Thomas Bruscano, Ph.D.

\_\_\_\_\_, Seminar Leader  
Michael J. Lawson, COL

\_\_\_\_\_, Director, School of Advanced Military Studies  
Thomas C. Graves, COL

Accepted this 23rd day of May 2013 by:

\_\_\_\_\_, Director, Graduate Degree Programs  
Robert F. Baumann, Ph.D.

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## ABSTRACT

THE ARMY'S CORE COMPETENCIES, by Major Richard E. Dunning, 53 pages.

In October 2011, the United States Army published doctrine espousing its newest core competencies: Combined Arms Maneuver (CAM) and Wide Area Security (WAS). The Army's use of the term core competencies introduced questions of validity since the Army failed to provide a common understanding of the terms, methods for competency identification, or their applicability in capability based planning or operations. The use of these terms is neither academic nor arbitrary as they are required by US Code Title 10, Department of Defense Directives, defense acquisitions, and joint doctrine.

Core competency theory originated when Prahalad and Hamel introduced the terms in their 1990 *Harvard Business Review* article in which they also outlined the roots of competitive advantage and the linkage of core competencies, core products, and value in end products. Firms follow methods to identify core competencies using definitions, characteristics, and properties to make resource and strategy decisions to outperform their competition. The currently espoused Army core competencies are not based on this business theory and therefore fail to provide the same value that businesses realize.

Improperly identifying core competencies places the Army at risk of expending precious resources and time towards the wrong assets and strategies. Placing core competencies in Army operations doctrine only exacerbates the poor adaptation of business theory. The Army's difficulty in identifying core competencies indicates the need for developing the theory that includes definitions and methods of identification. If the Army can correctly identify its core competencies, it can better manage capabilities in a resource constrained environment and design strategies and approaches that capitalize on organizational strengths.

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## ACRONYMS

ADP	Army Doctrine Publication
ADRP	Army Doctrine Reference Publication
CAM	Combined Arms Maneuver
CBA	Capabilities Based Assessment
CJCS	Chairman of the Joint Chiefs of Staff
DoD	Department of Defense
DoDD	Department of Defense Directive
JCA	Joint Capability Area
JCIDS	Joint Capabilities Integration and Development System
QDR	Quadrennial Defense Review
TRADOC	Training and Doctrine Command
USAWC	U.S. Army War College
WAS	Wide Area Security

## INTRODUCTION

We also need to take advantage of business process improvements being pioneered in the private sector. Over the past decade, the American commercial sector has reorganized, restructured, and adopted revolutionary new business and management practices in order to ensure its competitive edge in the rapidly changing global marketplace. It has worked. Now the Department must adopt and adapt the lessons of the private sector if our armed forces are to maintain their competitive edge in the rapidly changing global security arena.

— Department of Defense, Report of the Quadrennial Defense Review 1997

In October 2011, the United States Army published doctrine espousing its newest core competencies Combined Arms Maneuver (CAM) and Wide Area Security (WAS) in its Army Doctrine Publications (ADP) that are “fundamental to the Army’s ability to maneuver and secure land areas for the joint force.”<sup>1</sup> The Army’s intent for doctrine is that it presents “overarching doctrinal guidance and direction for conducting operations.”<sup>2</sup> The Army considers its doctrine to be a body of thought on how Army forces operate as an integral part of a joint force, a guide to action, and a basis for decisions about organization, training, leader development, material, Soldiers, and facilities.<sup>3</sup> Instead of providing a guide to action or an ability to support organizational decisions, the Army’s use of the term core competencies instead introduces questions of definition, application, and validity. In its doctrinal body of thought, the Army adopted specific terms; however, it failed to provide a common understanding of the terms, methods for competency identification, or their applicability in capability based planning or operations. The Army’s failure to provide understanding of core competencies, their identification, and their application inhibits the ability to realize the benefits of a useful business

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<sup>1</sup> U.S. Department of Army, Army Doctrine Publication No. 3-0, *Unified Land Operations* (Washington, DC: Department of the Army, 2011), 6.

<sup>2</sup> *Ibid.*, ii.

<sup>3</sup> *Ibid.*, 1.



theory. Without properly identifying its core competencies, the Army risks investment into the wrong capabilities which may lead to reduced effectiveness or increased inefficiency.

### Business

Businesses develop theories in order to increase their effectiveness in their markets, reduce their costs, adjust to changing dynamics, and increase their profits. Today's rapidly changing global marketplace is turbulent and complex, demanding effective responses, guiding strategies, and development of necessary capabilities. In order to respond appropriately with optimum solutions to new problems and lead the company, managers need the ability to make these decisions with a greater level of assurance and skill. These business theories and tools have evolved dramatically to meet the challenges of the marketplace with the concept of core competencies taking shape in the 1990s.

Prior to competency management, businesses measured their success based on the financial success of their portfolio using transaction cost governance, economic, and market structure analysis methods to make business strategic decisions.<sup>4</sup> However, they found the management and synchronization of these diverse entities difficult and unproductive. "Within a decade, three new theories emerged that countered the market-based structure analyses of competitive strategy. These were resource-based view of the firm, dynamic capabilities approach, and core competence perspective."<sup>5</sup> Businesses recognized that it was necessary to look at the internal characteristics of the entire firm and how those characteristics contributed to the products, thus leveraging the assets of the organization. Critical assets, such as technology and

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<sup>4</sup> Jay B. Barney and Delwyn N. Clark, *Resource-Based Theory: Creating and Sustaining Competitive Advantage* (New York: Oxford University Press, 2007), 165.

<sup>5</sup> YanBing Zhang, "Development of a Structured Framework for Core Competence Evaluation in the Manufacturing and Service Industries" (PhD diss., Sheffield Hallam University, 1999), 3.

knowledge based capabilities, found within the organization proved to be the most competitive contributors.

In addressing these critical assets, Prahalad and Hamel introduced the term core competencies in their 1990 *Harvard Business Review* article in which they also outlined the roots of competitive advantage, identification of core competencies and core products, and the linkage of these concepts to add value to businesses. They defined core competencies as the “collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies.”<sup>6</sup> They argued that core competencies were deep proficiencies that enabled organizations to deliver unique values to customers.

Core competence management comprises three elements: identification, leveraging, and building. Building and leveraging competencies are the processes by which competitive advantage is created and sustained but the key to both of them is identification—considered one of the most important contributions of a senior manager.<sup>7</sup> Firms identify their most valuable capabilities through a thorough internal analysis of capabilities and a determination on their contribution of these assets in the market environment against the competition. Taxonomy supports the rigorous scientific process of discovery and a common language enables other members of the firm to devise ways to use those capabilities. Without a practically useful framework, the identification of core competencies can easily turn into a “political process.”<sup>8</sup>

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<sup>6</sup> C.K. Prahalad and Gary Hamel, "The Core Competence of the Corporation," *Harvard Business Review* 68, no. 3 (May-June 1990): 81.

<sup>7</sup> Zhang, “Development of a Structured Framework,” 7.

<sup>8</sup> Jeremy Klein, David Gee, and Howard Jones, "Analysing Clusters of Skills in R&D-- Core Competencies, Metaphors, Visualization, and the Role of IT," *R&D Management* 28, no. 1 (January 1998): 38.

## Department of Defense Adapts

The military identifies, builds, and leverages its capabilities to create conditions that achieve strategic aims. Contextually, while environments, roles, missions, and metrics are different for a military organization, it also has a stake in identifying and applying effective and efficient capabilities. For the sake of efficiency, the Department of Defense (DoD) began using elements of core competency theory in the 1990s when making decisions about downsizing and outsourcing, and then expanded the use into acquisitions and capabilities management. The concept of ‘core’ in DoD has also been associated with legislative requirements to establish core logistics capabilities in government-owned military maintenance depots.<sup>9</sup> The term “core function” gained increased and more expanded use within DoD, beginning with DoD’s publication of its September 2001 Quadrennial Defense Review Report, which recommended the identification of core and non-core functions.<sup>10</sup> Although the use of these terms have increased in usage, services and agencies have had difficulty translating the corporate-based core competency framework to a non-commercial context, especially definitions such as competitors, competitive advantage, products, and business units.<sup>11</sup> Instead DoD’s interpretation reflected an emphasis on output focused capabilities as opposed to internal capabilities that leverage others.

The operational environment where the military needs to apply these capabilities is characterized by uncertainty, complexity, and rapid change, requiring persistent engagement.<sup>12</sup>

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<sup>9</sup> United States General Accounting Office, *Defense Management: DoD Faces Challenges Implementing Its Core Competency Approach and A-76 Competitions* (Washington, DC: United States General Accounting Office, 2003), 7.

<sup>10</sup> U.S. Department of Defense, *Quadrennial Defense Review Report* (Washington, DC: Department of Defense, 2001), 53.

<sup>11</sup> Defense Business Board, *Next Steps on DoD Core Competency Review Task Group* (Washington, DC: Defense Business Board, 2003), 3.

<sup>12</sup> Chairman of the Joint Chiefs of Staff, Joint Publication No. 3-0, *Joint Operations* (Washington, DC: Department of Defense, 2011), ix.

The complexities of the future security environment demand that the United States be prepared to face a wide range of threats of varying levels of intensity. Success in countering these threats will require the skillful integration of the core competencies of the services into a joint force tailored to the specific situation and objectives.<sup>13</sup> In order to meet the challenges of this security environment, the Department identifies desired capabilities based on potential missions and threats and develops them into joint capabilities. Meeting the requirements of strategic guidance entailed increasing funding for a few key capabilities while protecting others at existing levels or making comparatively modest reductions.<sup>14</sup> Determining which capabilities are the few key capabilities that bring the most value to the contributions of a military force is a crucial task.

To focus the department and the services, the Defense Authorization Acts of 2008 mandated that the Quadrennial Defense Review (QDR) focus on not only the roles, missions, and capabilities of the Department of Defense and the services but also on the core competencies that support the core missions and activities.<sup>15</sup> Core missions and activities support the wide range of security challenges in the future security environment, including: the proliferation of weapons of mass destruction, the rise of modern competitor states, violent extremism, regional instability, transnational criminal activity, and competition for resources. “Taken together, these factors give rise to a future security environment likely to be more unpredictable, complex, and potentially dangerous than today.”<sup>16</sup> The Chairman of the Joint Chief of Staff is responsible for the

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<sup>13</sup> Chairman of the Joint Chiefs of Staff, *Joint Vision 2020* (Washington, DC: US Government Printing Office, 2000), 12.

<sup>14</sup> U.S. Department of Defense, *Defense Budget Priorities and Choices* (Washington, DC: Department of Defense, 2012), 9.

<sup>15</sup> House of Representatives, *National Defense Authorization Act for Fiscal Year 2008, Conference Report to accompany H.R. 1585* (Washington, DC: US Government Printing Office, 2007), 286.

<sup>16</sup> Martin E. Dempsey, *Capstone Concept for Joint Operations: Joint Force 2020* (Washington, DC: Department of Defense, 2012), 3.

development of military strategy that includes the necessary assessments to determine the capabilities of the Armed Forces of the United States and its allies as compared to those of possible adversaries.<sup>17</sup> For the CJCS to determine these capabilities, he must understand what capabilities and core competences are.

The Department of Defense defines a “capability” as “the ability to achieve a desired effect under specified standards and conditions through combinations of means and ways to perform a set of tasks.”<sup>18</sup> To support its capabilities based approach, DoD organized capabilities into aggregate Joint Capability Areas (JCA) that support joint mission areas.<sup>19</sup> Instead of finding the most valuable specific capabilities, the Department labeled each broad category group as a core competency. DoD views core competencies as aggregate capabilities of functionally-organized capabilities associated with the performance of, or support for, a DoD core mission area with the services performing the tasks and activities that supply these capabilities.<sup>20</sup>

#### U.S. Army Core Competencies

As a service component, the Army has the responsibility of providing its assets in support of combatant commanders. Because of the emphasis on competencies at the Department of Defense level, the Army has incorporated the lexicon into its doctrine and associated a central

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<sup>17</sup> U.S. Department of Defense, Department of Defense Directive 5100.01p, *Functions of the Department of Defense and Its Major Components* (Washington, DC: Department of Defense, 2010), 15.

<sup>18</sup> Joint Chiefs of Staff, J-8, *Capabilities-Based Assessment (CBA) User’s Guide Version 3* (Washington, DC: Force Structure, Resources, and Assessments Directorate (JCS J-8), 2009), 6.

<sup>19</sup> Chairman of the Joint Chiefs of Staff, CJCS Instruction 5120.02B, *Joint Doctrine Development System* (Washington, DC: Department of Defense, 2009), A-8. Joint Capability Areas are intended to provide a common capabilities language for use across many related DoD activities and processes. According to US Code Title 10, DoD is required to show linkage of competencies to core mission areas.

<sup>20</sup> U.S. Department of Defense, *Quadrennial Roles and Missions Review Report* (Washington, DC: Department of Defense, 2009), 4.

idea focused on the seizing, retaining, and exploiting of the initiative to gain positional relative advantage over the enemy. “This is accomplished through simultaneous combination of offensive, defensive, and stability operations that set conditions for favorable conflict resolution. The Army’s two espoused core competencies- combined arms maneuver and wide area security-- provide the means for balancing the application of Army warfighting functions within the tactical actions and tasks inherent in offensive, defensive, and stability operations.”<sup>21</sup>

These core competencies are problematic for several reasons, including: they are defined at a broad complex organizational level; they are vague and overly abstract lacking specifics on routines, processes, and means; and they are focused on outcome oriented functions not on the internal strengths of the organization. The currently espoused Army core competencies are not based on the business theory’s characteristics that this monograph will outline, and they therefore fail to provide much value to the service. The Army will benefit more by incorporating core competency management theory to capitalize on its most valuable capabilities, know which ones to build in its capability-based force management, and which ones, when leveraged, bring the most value to its operations. The Army needs to understand the theory’s concepts, translate the theory, and develop methods of implementation to fully gain the benefits of core competencies. The Army needs to understand its role as a provider of forces to the combatant commanders in an uncertain national security environment in order to identify the valid core competencies. The Army would benefit more by focusing at the operational level on dynamic capabilities, “the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments.”<sup>22</sup> Failure to properly identify its core competencies places the Army at risk of expending precious resources and time towards the wrong assets. Placing core

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<sup>21</sup> Department of the Army, *Unified Land Operations*, 5-6.

<sup>22</sup> David J. Teece, Gary Pisano, and Amy Shuen, "Dynamic Capabilities and Strategic Management," *Strategic Management Journal* 18, no. 7 (1997): 516.

competencies in Army operations doctrine only exacerbates the poor adaptation of business theory.

## CORE COMPETENCIES

During the 1970s and early 1980s, U.S. business academics turned their attention to strategic management as the key to competitive success. Systems thinking led to the study of the corporate environment and the external factors affecting organizational strategy and success.<sup>23</sup> Strategic management gurus, such as Michael Porter, focused on managing a portfolio in order to select from options to diversify, decentralize, integrate, or merge activities. However, evaluating the sources of competitive advantage requires a the analysis of a firm's internal strengths and weaknesses as well.<sup>24</sup> The resurgence of interest in the firm's resources as a foundation for strategy reflected the dissatisfaction with static, equilibrium frameworks of industrial organization economics.<sup>25</sup>

Emerging as a result of the relentless competition since the 1990s, core competency theory focuses on identifying, building, and leveraging internal capabilities that firms must constantly adapt, renew, reconfigure and re-create internal capabilities to remain competitive. The most valuable internal capabilities create sustained competitive advantage in the market environment. This theory links the internal technical and intellectual know how through the internal processes and products of the organization to its end products and services. It focuses on 'how' an organization creates and sustains the sources of competitive advantage. "In fact, firms

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<sup>23</sup> Sylvia Horton, "Introduction - the Competency Movement: Its Origins and Impact on the Public Sector," *The International Journal of Public Sector Management* 13, no. 4 (2000): 308.

<sup>24</sup> Jay B. Barney, "Looking Inside for Competitive Advantage," *The Academy of Management Executive* 9, no. 4 (1995): 49.

<sup>25</sup> Robert M. Grant, "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation," *California Management Review* 33, no. 3 (Spring 1991): 114.



which consistently built on their core skills and aggressively pursued the sources of competitive advantage tended to be the most successful in the long term.”<sup>26</sup>

This section of the monograph provides an overview of competency management theory to build a foundation of understanding for application in the U.S. Army. First, an expansion on the background of competence management to give insight into the internal capabilities that generate competitive advantages and what that means to a firm. Next, terms and descriptions provide a common language concerning firm assets that supports the identification of core competencies. Next, business examples provide insight into successful implementation of core competencies, while pitfalls demonstrate potential traps and hazards. Finally, a useful framework for identification provides a sound method to transfer to the military.

#### An Inside-Out Approach: Foundations of Core Competencies

“Often described as an ‘inside out’ approach, competence-based competition grew as a response to the ‘outside-in’ approach of Michael Porter’s competitive forces theory.”<sup>27</sup> Porter’s theory focused on understanding the external opportunities and threats to develop a business strategy based on industry attractiveness, demanding that the firm obtain the requisite capabilities and resources.<sup>28</sup> Several challenges to this theory emerged, including over-emphasis on structure and market barriers, inattention to uncertainty, bias to product-market approach, and failure to recognize special resources and intangible assets.<sup>29</sup> Empirical evidence revealed that sustainable

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<sup>26</sup> William C. Bogner and Howard Thomas, “Core Competence and Competitive Advantage: A Model and Illustrative Evidence from the Pharmaceutical Industry” (Faculty Working Paper, University of Illinois at Urbana-Champaign, 1992), 37.

<sup>27</sup> Zhang, “Development of a Structured Framework,” 2.

<sup>28</sup> *Ibid.*, 2.

<sup>29</sup> S. A. Lippman and R. P. Rumelt, “Uncertain Imitability: An Analysis of Interfirm Differences in Efficiency under Competition,” *Bell Journal of Economics* (1982): 438, and Jay B. Barney, “Strategic Factor Markets: Expectations, Luck, and Business Strategy,” *Management*

competitive advantage stems mainly from internal firm characteristics and the development of plans that capitalize on these strengths.<sup>30</sup> The resource-based view, core competency view, and distinctive capabilities view emerged as complimentary counterpoints to market structure analyses of competitive strategy.<sup>31</sup>

The resource-based view is a foundation of core competency theory by emphasizing heterogeneously distributed firm-unique resources and capabilities as the genesis of competitive advantage.<sup>32</sup> This view explicitly focuses on the strategies of implementation that create value from its tangible and intangible resources.<sup>33</sup> “The resource based view recognizes that unique resources are not valuable unless they exploit opportunities and/or neutralize threats.” The most likely sources of sustained competitive advantage in the marketplace come from firm resources and capabilities that are valuable, rare, and socially complex.<sup>34</sup>

Examination of these individual internal intangible assets led firms to identify the interconnectedness between skills, knowledge, and attributes among teams of employees inside functional areas that created diversification in products. This resulted in a view where intellectual and cultural assets were advocated as the major barrier to imitation.<sup>35</sup> In 1990, Prahalad and

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*Science (1986-1998)* 32, no. 10 (1986): 1240.

<sup>30</sup> Zhang, “Development of a Structured Framework,” 3.

<sup>31</sup> Richard P. Rumelt, forward to *Competence-Based Competition* edited by Gary Hamel and Aime Heene (New York: John Wiley & Sons Ltd, 1994): xv-xix. The theories of resource-based view, core competencies, and dynamic capabilities emerged as complementary counterpoints to market structure analyses of competitive strategy.

<sup>32</sup> Catherine L Wang and Pervaiz K Ahmed, “Dynamic Capabilities: A Review and Research Agenda,” *The International Journal of Management Review* 9, no. 1 (2007): 35.

<sup>33</sup> Barney and Clark, *Resource-Based Theory*, 162.

<sup>34</sup> Barney, “Looking Inside,” 52-55.

<sup>35</sup> Hamel and Heene, *Competence-Based Competition*, 149-169.

Hamel coined the term ‘core competencies’ when they defined them as “the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies.”<sup>36</sup> They believed core competencies harmonized streams of technology, organized work, and delivered value within global competition.<sup>37</sup> Other definitions and descriptions of core competencies that emerged include cognitive traits such as organizational routines for approaching ill-structured problems, shared values systems, and tacit understandings of the value chain interactions.<sup>38</sup> Drejer describes the structural components of a competency: hard technology, human beings, organization, and culture.<sup>39</sup> Not unlike an activity chain, the capabilities of the firm add value to core products which are then incorporated by the firm into end products.

The firm is able to focus its efforts by identifying those capabilities that add the most value to the end products and are used across the firm in several core products. A firm is conceived as a hierarchy of core competencies, core products, and market-focused business units that are ‘fit to fight.’<sup>40</sup> Using the resource based view, managers answer the question of value to evaluate the contribution of internal resources and capabilities.<sup>41</sup> As the demands of the market environment change, the relationship of competencies to competitive advantage will not be stable over time, requiring the firm to constantly change and improve the skills that underlie its core

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<sup>36</sup> Prahalad and Hamel, “Core Competence of the Corporation,” 82.

<sup>37</sup> *Ibid.*, 85.

<sup>38</sup> Bogner and Thomas, “Core Competence and Competitive Advantage,” 2.

<sup>39</sup> Anders Drejer, “Organizational Learning and Competence Development,” *The Learning Organization* 7, no. 4 (2000): 209.

<sup>40</sup> Prahalad and Hamel, “Core Competence of the Corporation,” 90.

<sup>41</sup> Bogner and Thomas, “Core Competence and Competitive Advantage,” 3.

products and services.<sup>42</sup> In order to address the influence of market dynamism and firm evolution over time, the dynamic capabilities view adds a focus on the dynamic capabilities to maintain the competitive advantage of a firm.<sup>43</sup>

### Competency Terms and Characteristics

"The term competencies remains an experience-near concept which needs further conceptual clarification if it is to serve the purpose of theory building"<sup>44</sup> Even in their original definitive article, Prahalad and Hamel's descriptions of this phenomena are found to be too general and of little use without additional details.<sup>45</sup> Within the business community, many practitioners and theorists have provided additional definitions, characteristics, and identification methods related to the typology of firm assets. A firm is comprised of many tangible and intangible assets described in various terms. Tangible assets are people, facilities, raw materials, equipment, and such. Intangible assets are knowledge, culture, routines, and such. A combination of tangible and intangible assets is a capability that performs a specific function with a desired effect. Capabilities have a vertical integration where some at lower levels in the firm are simple and those that are at an organizational level are complex.<sup>46</sup>

Competences are a particular kind of organizational resource resulting from activities that are performed repetitively, or quasi-repetitively. They represent distinct bundles of organizational

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<sup>42</sup> Bogner and Thomas, "Core Competence and Competitive Advantage," 37.

<sup>43</sup> Wang and Ahmed, "Dynamic Capabilities," 7.

<sup>44</sup> Georg von Krogh and Johan Roos, "A Perspective on Knowledge, Competence, and Strategy," *Personnel Review* 24, no. 3 (1995): 62.

<sup>45</sup> Klein, Gee, and Jones, "Analysing Clusters," 38.

<sup>46</sup> Drejer, "Organizational Learning," 207.

routines and problem-solving.<sup>47</sup> They can be defined as a set of progressive, iterative understandings and skills held by corporate employees that collectively operate at the organizational level.<sup>48</sup> Core competencies are the internal capabilities of the firm that create competitive advantages and are flexible to be applied in a variety of core products and end products. Competencies are not in the resource flow, they are considered a stock of the company; they remain in the company, represented by the networks and know-how of employees and the collective attributes which add up to organizational culture.<sup>49</sup>

In order to help understand this phenomenon, authors expanded on definitions by describing competency properties and cognitive traits.<sup>50</sup> Some authors introduce questions of rareness, imitability, organization, and value for managers to ask when extracting meaning about internal capabilities.<sup>51</sup> Prahalad and Hamel provided three tests concerning access to a wide variety of markets, contribution to the customer's perceived value, and whether it is difficult for

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<sup>47</sup> Valery S. Katkalo, Christos N. Pitelis, and David J. Teece, "Introduction: On the Nature and Scope of Dynamic Capabilities," *Industrial and Corporate Change* 19, no. 4 (2010): 1177.

<sup>48</sup> William B. Edgar and Chris A. Lockwood, "Understanding, Finding, and Applying Core Competencies: A Framework, Guide, and Description for Corporate Managers and Research Professionals," *Academy of Strategic Management Journal* 10, no. 2 (2011): 28.

<sup>49</sup> Richard Hall, "A Framework Linking Intangible Resources and Capabilities to Sustainable Competitive Advantage," *Strategic Management Journal* 14, no. 8 (1993): 609.

<sup>50</sup> Jules Goddard, "The Architecture of Core Competence," *Business Strategy Review* 8, no. 1 (Spring 1997): 47. Imbued with experiential or tacit knowledge, differentiating from competition, cultural behavior, rare critical factors of success, sources of unique value to customer, flexible across products, and uniqueness that narrows strategy., and Bogner and Thomas, "Core Competence and Competitive Advantage," 2. Recipes and organizational routines for approaching ill-structured problems; shared value systems which direct action in unique situations; tacit understandings of the interactions of technology, organizational dynamics and product markets.

<sup>51</sup> Barney, "Looking Inside," 50.

competitors to imitate.<sup>52</sup> A company may have many assets and capabilities, fewer competencies, and it will have a limited of core competencies. Across the breadth of the business literature the following description of core competency emerges:

Core competencies are firm specific capabilities that are comprised of tangible and intangible assets that are leveraged directly or indirectly across a wide variety of markets to make a significant contribution to perceived customer value.

Knowledge and Culture: Core competencies are imbued with tacit or experiential knowledge, organizational routines, cultural behavior, shared value systems, and embedded with the synergistic effect of the combination of these intangible assets.

Technology, Skills, and Routines: Core competencies are a blend of multiple technologies or resources, knowledge, production and functional skills within processes along the value chain leading to the end products and services of the firm.

Competitive Advantage: Core competencies leverage firm assets to enable the creation of customer desired characteristics in product and services that are the source of competitive advantage.

Core competencies are valuable, rare, difficult to imitate, and non-substitutable.

#### A Method to Identify Core Competencies

While the literature on core competencies is extensive, and several empirical studies support the value of leveraging core competencies, few practitioners or researchers have claimed that they have developed and employed an effective approach of core competence identification.<sup>53</sup> Although there are only a few recommended methods, rigorous critical thinking and analytical skills are necessary and some techniques are integrated including capability architectures, systems thinking, analytical hierarchical processes, questionnaires, and interviewing stakeholders.

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<sup>52</sup> Prahalad and Hamel, "Core Competence of the Corporation," 83.

<sup>53</sup> Yves Doz, "Core Competency For Corporate Renewal: Towards A Managerial Theory Of Core Competencies," in Andrew Campbell and Kathleem Sommers Luchs, eds. *Core Competency-Based Strategy* (Boston: International Thomson Business Press, 1997), 53-75, and Klein, Gee, and Jones, "Analysing Clusters," 37- 42.

This monograph recommends a consensus process introduced by Kenneth Marino in his article “Developing Consensus on Firm Competencies and Capabilities.”<sup>54</sup> Each step of the process leverages other related analytical methods.

1. Prepare current product/ market environment profile
2. Identify sources of competitive advantage and disadvantage in the principal product/market segment
3. Determine the organizational capabilities and competencies of the firm
4. Determine which competencies and capabilities are ‘core’
5. Synthesize and reach consensus on core capabilities through dialogue
6. Assess future conditions in existing served markets
7. Identify emerging markets related to the firm’s skills
8. Formulate development plans

Marino’s consensus process is supported by constructing a common linkage that details the linkage of capabilities, processes, and end products such as a strategic architecture framework.<sup>55</sup> Systems thinking gives attention to the interdependence, synergy, or mutual convenience between strategic assets as they interact.<sup>56</sup> This awareness requires understanding

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<sup>54</sup> Kenneth E. Marino, “Developing Consensus on Firm Competencies and Capabilities,” *The Academy of Management Executive* 10, no. 3 (Aug 1996): 44. Marino recommends educating participants with articles describing core competence and capabilities in advance, focusing on each step at a time, encourage dialog, apply validity and objectivity tests, expect to compromise, beware of difficulties in defining terms.

<sup>55</sup> Architecture frameworks, such as the DoD Architecture Framework (DoDAF), define the critical linkage of actions and elements and the dependencies between them to provide simple and strong mechanisms for tracing capabilities, strategies, and effects/impacts.

<sup>56</sup> Rudy Martens, Ilse Bogaert, and Andre van Cauwenbergh, "Preparing for the Future as a Situational Puzzle: The Fit of Strategic Assets," *International Studies of Management & Organization* 27, no. 2 (1997): 11.

the nature of interactions among the parts.<sup>57</sup> Structure, people, processes, culture produce combinations that can enable a firm to realize its full competitive advantage.<sup>58</sup> Strategic architecture and systems thinking provide the manifest content to determine what capabilities are doing and how the firm is organized. Interviews with corporate professionals verify the results of the content analysis and enable a more comprehensive view of interactions. “It was only the interviews with internal professionals which consistently allowed the actual competence to emerge.”<sup>59</sup>

Finally, an analytical hierarchical process combines the information obtained from the architecture analysis, systems thinking, and stakeholder input to rank capabilities within the firm.<sup>60</sup> The use of information technology, in the form of computer-based analysis, enables the analysis of skills that are mutually supportive.<sup>61</sup> This process is not simple or quick. Companies invest hundreds of hours and significant funds to determine how to align their assets, and since market conditions constantly change, it is necessary to reframe the analysis as different core competencies can be identified because assets are both situation and time bound.<sup>62</sup>

### Pitfalls

Given the discrepancies of terms and the resource intensive nature of competency identification, it is not unusual for firms to make many errors leading to pitfalls and perceived

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<sup>57</sup> Jamshid Gharajedaghi, *Systems Thinking: Managing Chaos and Complexity: a Platform for Designing Business Architecture*, 3<sup>rd</sup> Ed. (Burlington, MA: Morgan Kaufmann, 2011), 23.

<sup>58</sup> Barney, “Looking Inside,” 50.

<sup>59</sup> Edgar and Lockwood, "Understanding, Finding, and Applying," 62.

<sup>60</sup> Zhang, “Development of a Structured Framework,” 55.

<sup>61</sup> Klein, Gee, and Jones, “Analysing Clusters,” 40.

<sup>62</sup> Martens, Bogaert, and van Cauwenbergh, “Preparing for the Future,” 15.



failure of the theory. Many of the errors are the result of vague narratives, over-specificity, over-generalization, problematic circular logic, overly abstract concepts, meta-competencies, or the use of broad collections of competencies and capabilities.<sup>63</sup> Senior managers are often inclined to use the term to justify the importance of specific areas or out prioritize other areas. Similar designation of ‘value’ and the meaning of ‘core’ may result in poor decisions for resource distribution.<sup>64</sup> In such an environment, there is a vested interest for everyone to prove what they do is core.

The decision to invest into capabilities should consider if they fit the external situation. Alignment from resource to competitive advantage ensures that the product/market perspective and the resource perspective are combined.<sup>65</sup> The market will also not remain static, making it necessary to conduct analysis on a continuous basis in all organizations.<sup>66</sup> Technology-based assets will only retain an advantage for a limited well-known life cycle.<sup>67</sup> These changes mean that competencies cannot be assumed to be stable entities that can be identified and defined once and for all. Rather, it is necessary to tend to competence development “Furthermore, when changes in environmental factors render the core firm resource itself obsolete, diversification by

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<sup>63</sup> Martens, Bogaert, and van Cauwenbergh, “Preparing for the Future,” 14, and Marino, “Developing Consensus,” 50, and Jeremy Klein, “Beyond Competitive Advantage,” *Strategic Change* 11, no. 6 (Sep/Oct 2002): 319.

<sup>64</sup> Klein, Gee, and Jones, “Analysing Clusters,” 38. Core competencies are more than outstanding capabilities and are part of the organization as a whole instead of a particular part of it. In practice, the term ‘core competence’ is often used to denote something that a company, or part of a company, believes that it is good at. In effect, the term ‘core competence’ has become equivalent to ‘center of excellence’, but with greater legitimacy.

<sup>65</sup> Martens, Bogaert, and van Cauwenbergh, “Preparing for the Future,” 14.

<sup>66</sup> Drejer, “Organizational Learning,” 210.

<sup>67</sup> *Ibid.*, 207. The application of technology follows an S-curve shaped life cycle as competitors adapt to the new technology or it reaches maturity. Firms must continuously apply new technology to lead their markets before the technology passes maturity or the competition adapts.

deploying the core resource would no longer be effective in preserving the value of the resource. In this case, a better strategy for the firm is to develop capabilities that enable the firm to efficiently adapt to constantly changing and fast evolving environments.”<sup>68</sup>

### Successful Business Examples

The research in this field has produced several examples of firms that have demonstrated the applicability of this theory. These firms demonstrate how core competencies were leveraged inside the firm to blend capabilities through processes to add value to the end product or service.

#### Toyota

The gradual extension of lean production, that was pioneered by Toyota from 1938, reflects Toyota’s routine of “self-testing and adapting.” Routines created a dynamic lock-in guiding the development of Toyota Production System in particular during the crucial 1949-1950 period.<sup>69</sup> These procedural and cultural innovations impacted such activities as changing a die, which Toyota could do in one third the time as the American auto industry. Success changed the game with the differentiating factors being flexibility and control.<sup>70</sup>

Toyota’s core competencies concerning quality focused on internal organizational processes in production. This increased communication, increase in quality, and reduction in waste propelled it ahead of others in the auto industry. For example, quality control is a process that can be easily adopted by firms, whereas Toyota’s Total Quality Management (TQM) is not just a process, but requires the firm’s capability of developing an organizational-wide vision,

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<sup>68</sup> Barney and Clark, *Resource-Based Theory*, 202.

<sup>69</sup> Hugo van Driel and Wilfred Dolfsma, “Path Dependence, Initial Conditions, and Routines in Organizations: The Toyota Production System Re-examined,” *Journal of Organizational Change* 22, no. 1 (2009): 53-55.

<sup>70</sup> Gharajedaghi, *Systems Thinking*, 7.

empowering employees and building a customer-orientation culture. “TQM requires the firm to not only install a quality management process, but more importantly, to tap into the tacit ‘energy’ of the firm.”<sup>71</sup>

Another aspect of Toyota competencies tapping into the ‘energy’ of the firm is the use of value-stream mapping to identify the waste as a product or service travels through the corporation. “Value-stream maps are created by cross-functional teams of people directly involved in the process comparing the current and future states in order to continuously improve activities.”<sup>72</sup> Toyota’s core competencies were not described as ‘the ability to make high-quality cars’ although these were the outputs of the firm. Its core competencies expanded into every end product and processes within all functional areas.

Toyotas internal capabilities concerning reducing waste and improving quality were sources of competitive advantage and are considered core competencies. They are comprised of people, structure, organization, and culture. They blend tangible and intangible assets of the firm to produce value in the end product and services. They are what Toyota does ‘deep’ within its core processes that are the source of competitive advantage as others like Nissan were unable to adapt and change to Toyota’s higher quality products.

#### Wal-Mart

One of Wal-Mart’s core competencies is its Point of Sale “pull” distribution system that integrates information systems, close ties to retailers, and in-house trucking and warehousing built since the 1980’s.<sup>73</sup> One of the constituent capabilities is a specific technique known as

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<sup>71</sup> Wang and Ahmed, “Dynamic Capabilities,” 11.

<sup>72</sup> M. L. Emiliani and D. J. Stec, “Using Value-Stream Maps to Improve Leadership,” *Leadership & Organizational Development Journal* 25, no. 8 (2004): 623.

<sup>73</sup> Alan S. Khade and Nathan Lovaas, “Improving Supply Chain Performance: A Case of Wal-Mart’s Logistics,” *International Journal of Business Strategy* 9, no. 1 (2009): 160.

“cross-docking” that transfers and distributes goods between suppliers and its stores. Running 85% of its own goods through its own warehouses increased efficiency, minimized handling costs, and resulted in a daily 3% cost advantage. This technique created low stable prices that impacted the entire organization including promotions, employee benefits and loyalty, attraction of customers, and greater sales.<sup>74</sup>

Additional capabilities in the distribution value chain included the use of information technology to transmit stocking information across functional areas. “A well-known example is when a particular product has been sold through check-out bar code scans, the information is used not only to calculate how much the customer owes but is also transmitted to a companywide database. Without increasing the workload of the checkout clerk, and without burdening other company employees, timely and detailed sales information is collected for processing and use.”<sup>75</sup> Wal-Mart’s cross-docking capability and use of information technology indirectly created value for the customer and gave it a competitive advantage over competitors such as K-mart.

Wal-Mart’s blending of assets, skills, knowledge, and corporate culture resulted in a competitive advantage in the market. It did not matter what product was in the system or what region of the U.S. it was serving, the core competence applied. Wal-Mart’s core competencies were found inside the company as sources of competitive advantage that the customer valued.

### Conclusion

Like Toyota and Wal-Mart, managers must look inside their firm for valuable, rare, and costly-to-imitate resources, and then exploit these resources through their organization to create

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<sup>74</sup> Goddard, “The Architecture of Core Competence,” 49.

<sup>75</sup> Francis Fukuyama and Abram N. Shulsky, "Military Organization in the Information Age: Lessons from the World of Business," in *Strategic Appraisal: The Changing Role of Information in Warfare*, edited by Zalmay Khalilzad, John White, and Andy W. Marshall (Santa Monica: Rand Corporation, 1999), 330.

sustained competitive advantage.<sup>76</sup> “Senior management should spend a significant amount of time developing the strategic architecture, a roadmap of the future, that identifies core competencies and their constituent technologies.”<sup>77</sup> A strategic architecture makes resource allocation and priorities understandable, transparent, consistent, and adds definition to company vision. Creating this architecture requires understanding the theory, understanding the terminology, collecting information from various sources, incorporating systems thinking, and applying critical analytical skills.

Uncertain market environments are very dynamic, requiring firms to constantly reassess their core competencies. “Through an interactive process of learning, firms alter their core competencies continuously in an effort to maintain competitive advantage in a changing environment.”<sup>78</sup> Within this market environment, the ability of a company to identify, build, deploy, and protect its core competencies is likely to yield differences in its performance.<sup>79</sup> “In conditions of uncertainty, firms have a strong incentive to retain flexibility to move as quickly as possible to create the required resources and capabilities when uncertainty is resolved.”<sup>80</sup> The most important thing senior managers can do is correctly identify the core competencies to ensure that resources are aligned to create sustained competitive advantage while avoiding pitfalls.

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<sup>76</sup> Barney, “Looking Inside,” 50.

<sup>77</sup> Prahalad and Hamel, “Core Competence of the Corporation,” 87.

<sup>78</sup> Bogner and Thomas, “Core Competence and Competitive Advantage,” 37.

<sup>79</sup> Gary Hamel and C.K. Prahalad, “The Concept of Core Competence,” in Hamel and Heene, *Competence-Based Competition*, 11-33.

<sup>80</sup> Barney and Clark, *Resource-Based Theory*, 174.

## THE DEPARTMENT OF DEFENSE ADOPTS CAPABILITIES AND COMPETENCIES

During the 1990s, under pressure to reduce costs, DoD implemented best business practices in multiple areas to increase efficiencies within the management of operations initially focusing on its ‘core functions.’<sup>81</sup> Known as functional process improvement, business process re-engineering, or revolution in business affairs, best practices were put into effect to streamline the Department towards ‘core functions’ while reducing costs.<sup>82</sup> DoD’s research on competencies in the early 1990s identified outsourcing as “a strategic tool to enhance the capabilities and effectiveness of the entire enterprise, not primarily as a means for reducing function costs.”<sup>83</sup> Strategic management tools and techniques that emphasized effectiveness and efficiency also emphasized “placing primacy for resource allocation decisions into the hands of those responsible for the mission.”<sup>84</sup>

The period after Goldwater-Nichols also saw a greater emphasis of ensuring those responsible for their missions were making the decisions. An evolution of roles, missions, functions, and responsibilities in the joint force emphasized service responsibility to provide capabilities to the combatant commanders, who should be the “principal source for identifying gaps in capability to carry out their assigned operational missions...the CINC’s [combatant commander’s] role should include direct involvement in evaluating how well DoD’s resource

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<sup>81</sup> U.S. Department of Defense, *Department of Defense Plan for Streamlining the Bureaucracy* (Washington, DC: Department of Defense, 1993), viii-ix. While the Gore Report of 1993 primarily focused on government waste and inefficiency, elements of the report impacted efforts at transforming the way the government conducts the business of defending the country as well.

<sup>82</sup> DoD, *Streamlining the Bureaucracy*, 24-26, and U.S. Department of Defense, *Report of the Defense Science Board on Outsourcing and Privatization* (Washington, DC: Office of the Under Secretary of Defense for Acquisition and Technology, 1996), 18a.

<sup>83</sup> DoD, *Outsourcing and Privatization*, 18a.

<sup>84</sup> *Ibid.*, 51.

plans satisfy its needs.”<sup>85</sup> From an outcome-based perspective, DoD began using the term core competencies as the “set of specific capabilities or activities fundamental to a service or agency role” in order to differentiate the services.<sup>86</sup> The same emphasis on effectiveness, efficiency, and command responsibilities shifted to force development processes supporting the capabilities and competencies for Unified Action. The intent of capabilities-based thinking was to transition DoD from a “Cold War structure oriented around countering and maintaining superiority over specific threats to developing a wide range of military capabilities that can be applied across a broad spectrum of conflict.”<sup>87</sup>

The military assesses that the future security environment will be dynamic, uncertain, fraught with opportunities and challenges, transnationally dangerous, and with varying levels of intensity.<sup>88</sup> “Ambiguous threats may employ traditional or non-traditional means and technologies as they attempt to circumvent or undermine our strengths while exploiting our vulnerabilities.”<sup>89</sup> However, U.S. forces will be expected to deter or defeat any potential adversary.<sup>90</sup> The description of this security environment is the foundation for the development of military strategies, capabilities, and theater campaign plans. Rapid changes in the security

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<sup>85</sup> DoD, *Outsourcing and Privatization*, 54.

<sup>86</sup> U.S. Department of Defense, *Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces* (Washington, DC: Department of Defense, 1995), 2-20.

<sup>87</sup> Peter W. Matisoo, “Enabling Joint Interdependence through Capability Portfolio Management” (Master’s Thesis, Joint Forces Staff College, Joint Advanced Warfighting School, 2008), pg. 34.

<sup>88</sup> CJCS, *Joint Vision 2020*, 12.

<sup>89</sup> U.S. Department of Defense, *Report of the Quadrennial Defense Review* (Washington, DC: Department of Defense, 1997), 4.

<sup>90</sup> U.S. Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21<sup>st</sup> Century Defense* (Washington, DC: Department of Defense, 2012), 4.

environment will require greater speed in planning, conducting, and resourcing military operations.<sup>91</sup>

When operations are required, the expectation is that US forces must have an overmatch of available capabilities.<sup>92</sup> Identifying the right capabilities and competencies for the future depends on speculative operating environment estimates that provide the foundation upon which the joint staff develops more detailed concepts and architectures to guide force development.<sup>93</sup> In preparing for a wide range of threats while ensuring that one type of warfare preparation did not overshadow another, DoD implemented the Joint Capabilities Integration and Development System (JCIDS) to provide “an overarching evaluation mechanism that links joint concepts, capabilities, and systems.”<sup>94</sup>

This section addresses the evolution of DoD’s capabilities-based approach which has a significant effect on the Army’s ability to build and leverage its assets. Changes in the joint force with respect to the roles, missions, functions, competencies, and capabilities established the current relationship of the service that provides the forces and the combatant commander that employs the forces. How JCIDS operates in determining capabilities to face the future security

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<sup>91</sup> Dempsey, *CCJO Joint Force 2020*, 3.

<sup>92</sup> CJCS, *Joint Vision 2020*, 12.

<sup>93</sup> U.S. Joint Forces Command, *The Joint Operating Environment (JOE) 2010* (Suffolk, VA: Joint Forces Command, 2010), forward, and Bradford Brown, *Defense Acquisition University: Introduction to Defense Acquisition Management*, 10<sup>th</sup> ed. (Fort Belvoir, VA: Defense Acquisition University Press, 2010), 35-37. The President’s national security strategy provides the Secretary of Defense guidance for the national defense strategy, which in turn provides the Chairman guidance upon which to base the national military strategy. The national military strategy articulates the Chairman’s recommendations to the President and Secretary of Defense on the employment of the military element of power in support of the President’s national security strategy.

<sup>94</sup> Center for Strategic and International Studies, *Americas Uncertain Approach to Strategy and Force Planning* (Washington, DC: Center for Strategic and International Studies, 2006), 18, and Joint Forces Command, *JOE 2010*, 62.



environment is important for the services in their role as force providers of the joint force. Regulatory, doctrinal, and bureaucratic requirements establish the framework in which the Army attempts to identify its capabilities and its core competencies to create competitive advantage in the national security environment.

### The Shift to Capability-Based Forces

The Goldwater-Nichols Act of 1986 created functional and regional unified combatant commanders responsible to the president for mission planning and execution, bypassing the service chiefs who retained responsibility for organizing, training, and equipping the force.<sup>95</sup> The services no longer fight and win the nation's wars, a combatant commander with a tailored joint force does. The focus changed to the needs of the combatant commanders, the forces that they needed, and on DoD support activities; not on the capabilities of the individual services. This change in the force structure necessitated a review of the roles, missions, and functions.

The 1995 *Commission on Roles and Missions (CORM)* was the first report defining and identifying the core competencies of the services as "building blocks of their contribution to the combatant commanders." It reaffirmed the role of the military services in developing concepts, doctrine, tactics, techniques, and procedures that derive from their core competencies.<sup>96</sup> The report identified Army competencies: overseas presence, mobile armored warfare, airborne operations, light infantry operations, sustained land operations, and ground-based medium-altitude air defense.<sup>97</sup> The commission identified issues with institutional practices that allowed the services to independently develop and field new weapons which resulted in its recommendation that capabilities and requirements be reviewed in the aggregate, thus starting

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<sup>95</sup> Matisoo, "Enabling Joint Interdependence," 4.

<sup>96</sup> DoD, *Commission on Roles and Missions*, 2-4.

<sup>97</sup> *Ibid.*, ES-5, 2-20, 2-29.

DoD on the path toward “capabilities-based planning.”<sup>98</sup> “The success of the services in organizing, training, and equipping the joint force are their unique capabilities, but the services do not conduct combat operations—the combatant commanders do.”<sup>99</sup>

Instead of assigned functions, increasingly service core competencies would be assessed through what they brought to the joint fight while joint planning documents such as *Joint Vision 2010* and subsequent documents focused on broad calls for force-wide capabilities rather than on individual services.<sup>100</sup> The 1997 *Quadrennial Defense Review* continued the emphasis towards capabilities based planning, through a ‘Revolution in Business Affairs’ to assure management focus on core competencies.<sup>101</sup> A 2003 Senior Executive Council Task Force examined core competencies in detail to support alternatives to outsourcing including Prahalad and Hamel’s core competency framework. The SEC Task Force recommended an adapted definition of core competencies into DoD by defining core competencies.<sup>102</sup> Although the term core competencies is used during this transition to capabilities based forces, the services continued to have difficulty understanding and applying them.

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<sup>98</sup> DoD, *Commission on Roles and Missions*, 4-1, and Institute for Defense Analysis, *Military Roles and Missions: Past Revisions and Future Prospects* (Alexandria, VA, March 2009), ES-5.

<sup>99</sup> John J. Hamre, “Roles, Missions, and Requirements of the Department of Defense,” testimony before the House Armed Services Committee, Washington, DC, June 19, 2007, 3.

<sup>100</sup> CSIS, *Americas Uncertain Approach*, 16. Four capabilities lay at the heart of “full spectrum dominance.” Dominant maneuver, precision engagement, full dimension protection, and focused logistics.

<sup>101</sup> DoD, *QDR(1997)*, 15.

<sup>102</sup> GAO, *DoD Faces Challenges*, 10. SEC recommended definition, “A complex harmonization of individual technologies and ‘production’ (employment, delivery) skills that create unique military capabilities valued by the CINC.” Three themes remained common to each competency definition: (1) the knowledge and experience acquired by people, (2) the discrete and finite set of technologies the people employ, and (3) the business objectives to be achieved. It stated that DoD’s business objective to be achieved is warfare

In 2008, the adoption of the core competency term reached Title 10 responsibility as the Defense Authorization Act of 2008 mandated that the Quadrennial Defense Review (QDR) focus not only on the roles, missions, and functions of the Department and the services, but also on the core competencies that support the core missions and activities.<sup>103</sup> In an effort to emphasize a capabilities focus, the act replaced the terms “core competencies and capabilities” for “functions.”

While moving towards capabilities, DoD must still assign functions to its services, components, and departments to ensure functioning of the military. To lead joint decisions, it delegates responsibility to the Chairman of the Joint Chief of Staff for the “development of military strategy that includes the necessary net assessments to determine the capabilities of the Armed Forces of the United States and its allies as compared to those of possible adversaries.”<sup>104</sup> Additionally as part of the Department’s Readiness Reporting Systems, DoD mandates the services to identify mission essential tasks that support core competencies.<sup>105</sup> Although core competencies should enable an organization’s end services (operational tasks), DoD made an attempt to draw the link between mission essential tasks, core competencies, and core mission areas. With the prolific use of core competencies in business, their adaptation into best practices, and their insertion into capabilities and readiness, DoD needed a management system to bring this whole structure together.

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<sup>103</sup> *National Defense Authorization Act 2008*, 286.

<sup>104</sup> DoDD 5100.01, 15.

<sup>105</sup> U.S. Department of Defense, Department of Defense Directive 7730.65, *Department of Defense Readiness Reporting System (DRRS)* (Washington, DC: Department of Defense, April 23, 2007), 5. This construct is opposite of the business theory having competencies enabling the task/functions of the firm.

## DoD/Joint Capabilities Management

In 2004, the Joint Defense Capabilities Study determined that services dominate the current requirements process and that service planning did not consider the full range of solutions available to meet joint warfighting needs. The team recommended a capabilities-based process for identifying needs, creating choices, developing solutions, and providing capabilities—with the combatant commanders having major input.<sup>106</sup> Requests for capabilities originate from three different sources: the combatant commanders, the services, and from joint concepts.

The Capstone Concept for Joint Operations, which provides a broad description of how the future joint force operates, is the overarching warfighting concept that guides the development of future joint capabilities.<sup>107</sup> The procedures established in JCIDS support the Chairman, Joint Chiefs of Staff, and the Joint Requirements Oversight Council in advising the Secretary of Defense in identifying, assessing, and prioritizing joint military capabilities-based requirements and gaps in an integrated collaborative approach.<sup>108</sup>

To transform the military force to support the needs of the National Defense Strategy, the Department has three decision support systems; JCIDS, the Defense Acquisition Management

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<sup>106</sup> U.S. Department of Defense, *Joint Capabilities Study: Improving DoD Strategic Planning, Resourcing and Execution to Satisfy Joint Capabilities* (Washington, DC: Department of Defense, 2004), iii-iv. Changes to current structure included: Combatant commanders having major input to set joint needs as the foundation for defense programs, capabilities planning would be accomplished at the DoD level, greater input by leadership in the ‘front end’ of iterative planning processes.

<sup>107</sup> Robert Keenan, *Capabilities Development and Systems Acquisition Management 2013 Executive Primer*, ver. 18.0 (Fort Belvoir, VA: Army Force Management School, February 2013), 154.

<sup>108</sup> Keenan, *2013 Executive Primer*, 5-6. Joint/services concepts and integrated architectures to identify prioritized high risk capability gaps and integrated joint DOTMLPF-P approaches (materiel and non-materiel) Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities, and Policy (DOTMLPF-P)

System, and the Planning, Programming, Budgeting, and Execution process.<sup>109</sup> While the other systems focus on acquisition management and budgets, the primary objective of the JCIDS process is “to ensure the capabilities required by the joint warfighter to successfully execute the missions assigned to them are identified with their associated operational performance criteria.”<sup>110</sup> Based on recommendations of the Capabilities Study, JCIDS incorporated Joint Capability Areas as an organizational construct to support capability analysis, strategy development, investment decision making, capability portfolio management, and capabilities-based force development and operational planning.<sup>111</sup>

The Capabilities-Based Assessment (CBA) process within JCIDS identifies the capabilities required to successfully execute missions, the shortfalls in existing weapon systems to deliver those capabilities.<sup>112</sup> Defense acquisition programs must certify, among other requirements, that the program is being executed by an entity with a relevant core competency before they can progress beyond pre-systems acquisition into development.<sup>113</sup> An integrated architecture method includes not just material solutions but also doctrine, organization, and training needs and the relationship between tasks and activities. Using architectures, the JROC

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<sup>109</sup> Defense Business Board, *Capabilities Requirements Identification and Development Processes Review, Report to the Secretary of Defense, Report FY09-2* (Washington, DC: Defense Business Board, 2008), 3.

<sup>110</sup> Brown, *Introduction to Defense Acquisition Management*, 34.

<sup>111</sup> Keenan, *2013 Executive Primer*, 10. There are currently nine JCAs: Force Support; Battlespace Awareness; Force Application; Logistics; Command & Control; Net-Centric; Protection; Building Partnerships; and Corporate Management and Support.

<sup>112</sup> Brown, *Introduction to Defense Acquisition Management*, 35-37.

<sup>113</sup> *Ibid.*, 44.

will be responsible for prioritization of capabilities based on their contribution to realization of the Joint Operating Concepts.<sup>114</sup>

#### DoD and Joint Capabilities-Based Approach Assessment

Since Goldwater-Nichols, DoD has progressively evolved towards a strong capabilities-based approach to identifying needs and developing capabilities. However, the pace of transformation of the DoD business enterprise for providing joint warfighting capabilities has been much slow, despite these significant reform efforts.<sup>115</sup> Adoption of competency terms in law, regulations, or studies did not represent adoption of competency theory or the ability to benefit from its application. Although US Code and DoD incorporated ‘core competencies’ as a term, taken in context, they are still differentiating the services in the same manner as designating functions. Legislation that requires undertaking core competency, roles, and mission reviews only reinforce the things that the services think they do well and keep the joint force from focusing on the things that it does not do as well.<sup>116</sup> Services still dominate the input resulting in gaps not being identified that support joint needs. While Congress and the DoD have actively pursued doctrinal changes that emphasize joint forces, implementing these changes has been more problematic.<sup>117</sup>

According to a 2008 General Accounting Office report, “The JCIDS process has not yet met its objective to identify and prioritize warfighting needs from a joint capabilities

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<sup>114</sup> U.S. Department of Defense, *Transformation Planning Guidance* (Washington, DC: Department of Defense, 2003), 16.

<sup>115</sup> Matisoo, *Enabling Joint Interdependence*, 3.

<sup>116</sup> Hamre, “Roles, Missions, and Requirements,” 4.

<sup>117</sup> CSIS, *Americas Uncertain Approach*, 15.

perspective.”<sup>118</sup> The process is perceived as lengthy, service focused, and inattentive to combatant commander input, especially concerning short-term or emerging requirements.<sup>119</sup> Combatant commands lack analytic capacity and resources to become more fully engaged in JCIDS either by developing their own capability assessments or participating in reviews and commenting on proposals.<sup>120</sup> The current system, although improving, places the commander responsible for the mission at a disadvantage in determining the capabilities and competencies of the force that is needed for a specific environment and mission.

#### DoD and Joint Conclusion

“Providing military capabilities that operate effectively together to meet future challenges is the common purpose of the military departments, the Services, the defense agencies, and other DoD elements. All must focus on DoD’s real product- effective military operations.”<sup>121</sup> The Army operations within a joint environment to identify and develop capabilities to meet the challenges of the security environment. Commanders need to identify and have input into the capabilities that add value to the competitive advantage when plans become action. Based on the security environment, the regional focus, and the needs of combatant commanders, capabilities need tailoring for specific areas and for specific missions.

US Code, DoD, and Joint Doctrine have evolved to a capabilities-based process to identify, build, and leverage capabilities that must be integrated across all domains and account

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<sup>118</sup> United States General Accounting Office, *Defense Acquisitions: DoD’s Requirements Determination Process Has Not Been Effective in Prioritizing Joint Capabilities* (Washington, DC: United States General Accounting Office, 2008), 2.

<sup>119</sup> *Ibid.*, 14; DBB, *Capabilities Requirements Identification*, 4; Matisoo, “Enabling Joint Interdependence,” 42

<sup>120</sup> GAO, *DoD’s Requirements Determination Process*, 16.

<sup>121</sup> DoD, *Commission on Roles and Missions*, ES-1.

for geographic considerations and constraints.<sup>122</sup> What is missing from this capabilities-based process is inclusion of competency based theory beyond the use of the term. Core competencies enable the operational capabilities, inform strategies, and create competitive advantages across geographic regions and the wide range of threats in the future security environment. The desire to eliminate unnecessary duplication of operational capabilities and service functions is not a desire that should apply to core competencies.

The Department would benefit from building a strategic architecture that links capabilities, core competencies, operational capabilities, and functions to the core mission areas. In fact, mapping functions to Joint Capability Areas would be an interim step at best, because history shows that assignment of a function does not assure the availability of the requisite capability.<sup>123</sup> The current joint doctrine of assigning core competencies to a categorization framework without linking it to the core mission areas provides no understanding of the relationships between capabilities, competencies, and the functions that forces perform. To successfully acquire the capabilities required to form joint forces in dynamic future operating environments, defense strategic guidance must provide a sound framework for capabilities and investment areas. Alignment of capabilities requires a strategy that provides clear guidance for all decision making within the Department, indicating where to focus limited resources to achieve U.S. security objectives.<sup>124</sup> With the incomplete framework utilizing misunderstood terms, services, such as the Army, are left to create their own doctrine to meet these ill-defined procedural requirements.

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<sup>122</sup> DoD, *Quadrennial Roles and Missions Review Report*, 4.

<sup>123</sup> IDA, *Military Roles and Missions*, ES-10.

<sup>124</sup> Matisoo, "Enabling Joint Interdependence," 74.



## THE UNITED STATES ARMY CORE COMPETENCIES

The Army followed DoD and the joint staff in adopting core competency terms into its doctrine; however, without the full theoretical background, the identification of its competencies has been elusive. Many Army organizations identify essential tasks as core competencies and then build a responsibility hierarchy similar to nesting mission statements.<sup>125</sup> Branches of the Army have used the terms to identify sub-categories of functions, individual competencies, and leader competencies, but rarely related to an operational environment or competitive advantage.<sup>126</sup> Army Posture Statements have reiterated assigned functions, valued application of lethal force, or generally promoted excellence in unstated core competencies mostly addressing individual or leader competencies.<sup>127</sup> Army oriented literature has often mixed two related but separate concepts of workplace competencies and core competencies adding more confusion to the use of the term.<sup>128</sup>

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<sup>125</sup> U.S. Army Training and Doctrine Command, TRADOC Regulation 10-5, *Organization and Functions: U.S. Army Training and Doctrine Command* (Fort Monroe, VA: Training and Doctrine Command, 2009), 10, and U.S. Army Training and Doctrine Command, TRADOC Regulation 10-5-6, *Organization and Functions: United States Army War College* (Fort Monroe, VA: Training and Doctrine Command, 2005), 6, and U.S. Army War College, *How the Army Runs: A Senior Leader Reference Handbook 2011-2012* (Carlisle, PA: U.S. Army War College, 2012), 449.

<sup>126</sup> Department of the Army, Army Doctrine Reference Publication 3-09, *Fires*, (Washington, DC: Department of the Army, 2012), chapter 1, 3-4, and Robert M. Williams, "Maintaining Armor Core Competencies," *Armor* 116, no. 1 (Jan/Feb 2007): 4, and Department of the Army, Army Doctrine Reference Publication 2-0, *Intelligence*, (Washington, DC: Department of the Army, 2012), chapter 2.

<sup>127</sup> Department of the Army, *The United States Army 2004 Posture Statement* (Washington, DC: Office of the Chief of Staff U.S. Army, 2004), 4. This statement reiterates the 2001 Field Manual 1 core competencies. Department of the Army, *The United States Army 2009 Posture Statement* (Washington, DC: Office of the Chief of Staff U.S. Army, 2009), 11. The 2009 APS states that a core competency of land forces is to effectively, efficiently, and appropriately apply lethal force. Department of the Army, *The United States Army 2011 Posture Statement* (Washington, DC: Office of the Chief of Staff U.S. Army, 2011), 12.

<sup>128</sup> Aaron M. Zook, "Military Competency-Based Human Capital Management: A Step Toward the Future," (Strategy Research Project, U.S. Army War College, 2006), 4. This term

Nevertheless, US Code, DoD directives, and joint doctrine make the term ‘core competencies’ integral to the Army’s doctrine and acquisition processes. Proper implementation of core competency theory can support the Army’s identification of the most valuable capabilities for these processes. Competencies and capability development are elements that preserve the Army’s core capability to conduct decisive land operations, but only if done correctly.<sup>129</sup> So far, attempts to identify the Army’s core competencies have been made without a rigorous method, resulting in the universal confusion. This section introduces a background of Army competency related literature representing the development of the current espoused Army core competencies. An evaluation of these competencies against the business theory definitions, characteristics, and filters reveals that they are invalid. Two historical military examples provide insight into military core competencies and how competencies are connected to competitive advantage in the operational environment.

#### Previous Academic Work

Previous academic works on Army core competencies often take the term for granted as a representation of organizational capabilities, functions, or individual skills. Referencing the 1988 Field Manual 25-100, Robert J. Botters focused on core individual competencies instead of a post-Prahalad and Hamel definition for an organization.<sup>130</sup> He identified training core competencies as equal to mission essential tasks with the need for tactical training to maintain individual and collective core competencies in warfighting skills. Huba Wass de Czege

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often refers to two related but separate concepts, core competencies of the organization and workplace competencies of the individual.

<sup>129</sup> Department of the Army, Headquarters, G-8, *Army Equipment Modernization Strategy* (Washington, DC: Department of the Army, 2013), 3.

<sup>130</sup> Robert J. Botters, Jr, “The Proliferation of Peace Operations and U.S. Army Tactical Proficiency: Will The Army Remain a Combat Ready Force?” (Monograph, School of Advanced Military Studies, 1996), 7.

emphasized cultural and technical aspects of warfare and the need to retain skills associated with close combat, but did not address core competencies beyond the use of the term in his article's title.<sup>131</sup>

In a strategic research project, Frederick Rudesheim reviewed the concepts underpinning core competencies established by Prahalad and Hamel along with example evaluation criteria. Rudesheim provided a cursory background on the theory, recognized the difference between institutional and operational forces, and properly identified that proposed core competencies were often generalized statements describing the roles, mission, or assigned functions. However, he did not recognize the role of value in the competitive environment, nor did he address the tangible and intangible structure of capabilities and competencies. His research project demonstrated the trouble separating functions and processes which dilutes a comprehensive understanding of the value chain in creating a competitive advantage.<sup>132</sup>

Each of these authors touched on separate but important structural components of a whole—people, organization, assets, and culture—and they represent the Army's difficulty in identifying core competencies. Core competencies are an inextricable part of successful strategies, detailing the tangible and intangible within the organization that will be leveraged to fulfill the vision. "Organizational values and beliefs drive culture—the culture that will produce the competitive performance desired."<sup>133</sup> While culture is an important aspect of core competencies, routines, people, and assets are equally important.

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<sup>131</sup> Huba Wass de Czege, "Closing With the Enemy: The Core Competency of an Army," *Military Review* 80, no. 3 (May-June 2000): 8-10.

<sup>132</sup> Fredrick S. Rudesheim, "Discovering the Army's Core Competencies," (Strategy Research Project, U.S. Army War College, 2001)

<sup>133</sup> Stephen Brent Appleton, "The U.S. and Canadian Army Strategies: Failures in Understanding." (Research Paper, Strategic Studies Institute, USAWC, 2003), 35.

### U.S. Army Espousing Its Core Competencies

The 2009 *Army Capstone Concept* establishes the broad capabilities that the Army needs, stating that the Army must maintain its core competency of conducting effective combined arms operations in close combat to employ defeat and stability mechanisms against a variety of threats. Supporting ideas to a concept of operational adaptability forecast the foundation for the narrative of Combined Arms Maneuver and Wide Area Security.<sup>134</sup> The *Army Capstone Concept* of 2012, refines the concept of operational adaptability emphasizing flexible organizations, support of a wide variety of missions, regional alignment, and a focus on prevent, shape, and win. Competencies are only mentioned for leaders or technical competencies (skills) in mission command. CAM and WAS are mentioned but not as competencies.<sup>135</sup>

Describing how the future Army will operate, the 2009 *Army Operating Concept*, broadened the scope of traditional combined arms to include all elements of combat power with the integration and sequencing of all actions, activities, and programs necessary to seize, retain, and exploit the initiative in the context of full-spectrum operations. Achieving the necessary level of operational adaptability rests on two broad responsibilities which *The Army Operating Concept* introduces as CAM and WAS—treating the two concepts as organizational capabilities.<sup>136</sup>

The definitive publication for CAM and WAS, Army Doctrine Publication 3-0 *Unified Land Operations*, establishes the Army's operational framework which focuses on seizing and

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<sup>134</sup> U.S. Army Training and Doctrine Command, Pamphlet 525-3-0, *The U.S. Army Capstone Concept*, (Fort Eustis, Training and Doctrine Command, 2009), i. The foundations for the current competencies are seen in the six supporting ideas: develop the situation through action, conduct combined arms operations, employ a combination of defeat and stability mechanisms, integrate joint capabilities, cooperate with partners, and exert a psychological and technical influence.

<sup>135</sup> U.S. Army Training and Doctrine Command, Pamphlet 525-3-0, *The U.S. Army Capstone Concept* (Fort Eustis, Training and Doctrine Command, 2012), 11-14.

<sup>136</sup> U.S. Army Training and Doctrine Command, Pamphlet 525-3-1, *The U.S. Army Operating Concept* (Fort Eustis, Training and Doctrine Command, 2009), iii, 11, 13-14.

retaining initiative to gain relative positional advantage in a sustained mix of operations to prevent, deter, prevail, or create favorable conditions.<sup>137</sup> The doctrine recognizes that prefabricated solutions to tactical or operational problems do not exist because threats and environments are unique and adaptive. *Unified Land Operations* explains that within the context of offense, defense, and stability operations, CAM and WAS provide the means for balancing the application of the elements of combat power.

Both employ non-descript elements of combat power; however, Combined Arms Maneuver focuses on positive aims of defeating, seizing, and achieving while Wide Area Security focuses on the negative aims of protection, denial, and retention. *Unified Land Operations* recognizes that operational environments are unique and ever changing and that leaders will need to adapt unspecified combinations of ends, ways, and means. *Unified Land Operations* uses CAM and WAS as means for balancing operations, actions that commanders apply, and as descriptions of unique capabilities that the Army provides for the joint force commander, to be employed by the organization in the environment.<sup>138</sup>

Army Doctrine Publication 1, *The Army* is the publication that provides the overarching description of the Army, what it does, and where it is going. It also delineates mission, purpose, and roles from US Code, DoDD 5100.01 and establishes the Army's contribution to the Joint Force. In establishing the Army's contribution, *The Army* reiterates *Unified Land Operations*' core competencies and adds seven 'vital' enabling competencies; some of which are designated functions, statements of missions, or types of operations.<sup>139</sup> As an overarching organizational

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<sup>137</sup> Department of the Army, *Unified Land Operations*, 14.

<sup>138</sup> *Ibid.*, 6.

<sup>139</sup> Department of the Army, Army Doctrine Publication No. 1, *The Army* (Washington, DC: Department of the Army, 2012), 3-3. These enabling competencies include security cooperation, tailoring forces, entry operations, flexible mission command, the support we provide to the joint force and ourselves, domestic support, and mobilizing Reserve Components.

publication, the citing of core competencies along with ethics, descriptions of profession, creeds, and mottos is expected and valid. However, its identification of ‘enabling competencies’ also raises questions about the method of competency determination. The identification of Army core competencies through a concepts driven process, without a working core competency theory, and without a rigorous method has led the Army to espouse poor core competencies. If concepts in in overarching operational guidance and direction are misapplied, poorly constructed or illogically included, their usage creates opportunities for misunderstanding, semantics, mixed concepts, and poor application.<sup>140</sup>

### Validity of Army Core Competencies

#### Effects Driven Abstract Constructs

In its broadest sense a concept describes what is to be done; in its more specific sense, it can be used to describe how something is done.<sup>141</sup> Definitions and descriptions of CAM and WAS are very broad, focusing primarily on desired enemy effects and the environment. These concepts use defeat and stability mechanisms as means and operational art as the method to determine the ways; however, the mechanisms themselves are also descriptions of desired enemy effects.<sup>142</sup> The actual means and ways employed are left undefined; therefore, they do not clearly

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<sup>140</sup> Martin Dempsey, “Gen. Martin Dempsey on the Army Operating Concept” (presentation, YouTube, 9 September 2010) <https://www.youtube.com/watch?v=MWMym8yNT9Y&list=PLc4c2Aos-Xcga0v4j8yRKqvKLeWPZXTyZ>, (accessed 12 December 2012), and Andrew B. Nocks, “More Mumbo-Jumbo: The Clutter and Confusion within the Army’s Operational Concept of Unified Land Operations.” *Small Wars Journal* (8 June 2012), <http://smallwarsjournal.com/jrnl/art/more-mumbo-jumbo-the-clutter-and-confusion-within-the-army%E2%80%99s-operational-concept-of-unified> (accessed 12 December 2012), and J.P. Clark, “The Missed Opportunity: A Critique of ADP 3-0, *Unified Land Operations*,” *Military Review* (July-August 2012): 52.

<sup>141</sup> U.S. Army Training and Doctrine Command, *The U.S. Army Training and Doctrine Command Concept Development Guide* (Fort Eustis: Training and Doctrine Command, 2011), 5.

<sup>142</sup> Department of the Army, Army Doctrine Reference Publication No. 3-0, *Unified Land Operations* (Washington, DC: Department of the Army, 2012), chapter 2, 9-10.

establish the resources or routines required. Since competencies are based on doing capabilities that are performed routinely and evaluated against the competition, CAM and WAS do not meet basic definitional requirements. For example, they are so vague that the only aspect that truly differentiates the two competencies from themselves are the described aims, essentially detailing Clausewitz's positive and negative aims.<sup>143</sup>

This conceptual abstractness allows for adaptation to a wide range of contextual formulation, but this is not the same as creating access to a wide range of markets. While abstract concepts like CAM and WAS may serve as an operational heuristic (a quick reminder of what must be done), they provides little insight into the tangible and intangible assets required, how technology and knowledge are blended, or the unique roles of behavior, belief systems, and culture in creating a competitive advantage.<sup>144</sup> In order to know how they might create value, one needs to look further into all aspects of core competencies.<sup>145</sup>

An evaluation of CAM or WAS leads to questions on how they might create sustained competitive advantage, how they are valuable, rare, difficult to imitate, or non-substitutable. Their abstractness and valuable narrative of desired effects lends to their uncontested nature as they easily form 'golden hammers' that are applicable for every situation. Concreteness reduces misunderstanding about what is meant in the concept and allows for challenging the concept for its validity in a changing environment. Uncertain futures and uncertain threats should not drive imprecision in developing capabilities.

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<sup>143</sup> Carl von Clausewitz, *On War*, translated and edited by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1989), 42.

<sup>144</sup> Goddard, "The Architecture of Core Competence," 47.

<sup>145</sup> Prahalad and Hamel, "Core Competence of the Corporation," 81.

### Organizational Level Capabilities

It is better to describe CAM and WAS as organizational level capabilities or meta-competencies which are aggregates of competencies and left vague for motivational narrative purposes.<sup>146</sup> An example would be FEDEX saying it had a core competency in package delivery or Wal-Mart saying it is creating satisfied customers, which is exactly what their competition could say. With meta-competency definitions that encompass every means, every domain, and every purpose it is not possible to discern what the terms really mean. Without more specificity it is not possible to be evaluated against competency characteristics, especially differentiating from the competition, uniqueness, or narrowing of strategy.<sup>147</sup> Organizational level capabilities like CAM and WAS sound great for information briefs, and are useful for describing the Army in broad terms to those who are outside the force, but they add no value in developing operational approaches. They may actually confuse operators, creating an environment where the standard answers are to conduct CAM and/or WAS instead of thinking through the design of an operational approach.

### The Context of Competition

Within the operational framework of *Unified Land Operations*, CAM and WAS are means applied within the competitive environment directly against the competition to achieve organizational goals. They are also means for the commander to balance the application of the elements of combat power. Most empirical studies and examples in business identify competencies within the organization that are sources of value in the product or service as opposed to the service itself. Perhaps when only thinking about conventional forces and against certain adversaries that do not have combined arms this is an accurate description, but not against

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<sup>146</sup> Grant, "Resource-Based Theory," 117.

<sup>147</sup> Goddard, "The Architecture of Core Competence," 46.



near peers who also have the capability to conduct CAM or WAS. Context plays an important part in defining what competitive advantage means with regard to achieving operational goals or aims. Even the asymmetric threats that the Army has faced in recent years apply elements of combat power at their disposal for the same broad purposes and perhaps with more success. If the Army has been more successful, it is because of deeper and more specific capabilities.

Namely, the Army must expand on the architecture or the linkage for mapping capabilities to competitive advantages. Besides the operational forces, the Army is an institution consisting of enterprises with the function of fielding, training, and equipping the operational force. It regionally aligns its operational forces to focus on specific geographic combatant commands. It codifies its practices, routines, and processes into doctrine that ranges from individual and leader development to organizational doctrinal operations. These areas, when properly linked, have more potential for identifying core competencies that, when properly leveraged, create value operationally.

#### Validity Conclusion

Had the Army properly adopted the business theory, confirmatory evidence of espoused core competencies would reside in doctrine and processes that personnel performed routinely and that added value to the required functions of the Army. Instead, subsequent and subordinate doctrine is silent of the constituent capabilities that would contribute to espoused core competencies. Since competencies are a specific type of capability, CAM and WAS should have well defined processes, organization, culture, and people that provide the structure of the constituent capabilities. Further doctrinal work in operations and tactics should identify which tasks contribute to CAM and WAS.

Within the doctrine and academic literature review, there is also no evidence that the Army conducted a detailed rigorous method to survey capabilities within an architecture, applied them against evaluation criteria, conducted leader evaluation surveys, or applied analytical

approaches to find the most value producing competencies in the force. Such a survey would provide empirical evidence, causal relationships, and concreteness. Because they were developed conceptually, CAM and WAS retain abstractness which does not support an understanding of requisite tangible or intangible assets. They also lack context to understand who is the customer, what is the basis of competition, and what it means to have competitive advantage. Because of generalization, lack of technical or knowledge based capabilities, lack of distinction, non-recognition of the competition, and lack of valuation, CAM and WAS are organizational concepts that are better categorized as organizational level capabilities or meta-competencies.

It is understandable to avoid overly prescriptive operational doctrine because each situation is unique, requiring operational art to design an appropriate approach instead of relying on routines. However, the Army is full of areas that enhance, enable, and leverage operational capabilities that are more stable. These may be found inside headquarters, sustainment, the institutional Army, personnel management, or systems designed to support a learning and adaptive organization. The Army should not limit the use of core competency theory to conceptual performance-based tactical capabilities when looking for the most valuable capabilities.

### Historical Insight into Core Competencies in Action

#### Bedouins and Turks

During the Arab Revolt against the Ottoman Turkish rule 1916-18, British Army officer T. E. Lawrence examined the strengths of the Bedouins to determine an operational approach to defeat the Turks occupation of Arab lands. He found strength in the Arab irregulars' demonstrated competencies in nomadic desert living. This competency was a result of the combination of tangible and intangible assets such as the people, the culture, tribal organizations, routines, and physical assets such as small arms and camels. This competency led to the Arab

irregulars being used in a different role than the regulars whose role would only be to occupy places to which the irregulars had already given access.<sup>148</sup>

Lawrence examined the tangible and intangible aspects of operational environment as well as in his own forces: “In each I found the same elements, one algebraic, one biological, a third psychological.”<sup>149</sup> The Arabs had no indigenous army to face the Turkish military forces; they were organized in various non-unified tribes. Understanding the Bedouin competency in desert living, Lawrence strategically aligned ends, ways, and means to conduct a successful guerilla war against the Turks. “Our tactics should be tip and run: not pushes but strokes. We should never try to improve an advantage. We should use the smallest force in the quickest time at the farthest places.”<sup>150</sup>

By using mobility the Arabs could neutralize the Turks numerical superiority by deviating from the early twentieth century strategy of annihilation and its emphasis on the decisive battle. Lawrence developed a strategy that leveraged the Bedouin core competency to achieve a competitive advantage forcing the Turks to defend the railways needed for sustainment..<sup>151</sup> This Bedouin core competency compared to the Turks’ capabilities was valuable, rare, difficult to imitate, non-substitutable.

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<sup>148</sup> T. E. Lawrence, *Evolution of a Revolt* (Fort Leavenworth: Combat Studies Institute Reprints, 1990), 13, <http://server16040.contentdm.oclc.org/u?p4013coll7,37>, (accessed 1 April 2013).

<sup>149</sup> *Ibid.*, 8.

<sup>150</sup> T. E. Lawrence, *Seven Pillars of Wisdom: A Triumph* (New York: Anchor Books, 1991), 188-90, 196, 337.

<sup>151</sup> Lawrence W. Moores, “T. E. Lawrence: Theorist and Campaign Planner” (Monograph, School of Advanced Military Studies, 1992), 19, and Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (New York: Oxford University Press, 2001), 669.

Avoidance of enemy strengths were typical of traditional tribal warfare. The Bedouins could leverage their assiduous cultivation of desert power that allowed them to command the desert like a navy commanding a sea<sup>152</sup> Culturally, they were very independent and used to the moral strain of isolation. “The nomadic tendencies of the Bedouin minimized their vulnerability to Turkish counteraction.”<sup>153</sup> The Bedouin example demonstrates the importance of innate knowledge, culture, and experiential learning in developing a competency.

This core competency allowed the Bedouins to attack Aqaba from the unprotected desert to in the East after a six hundred mile trip through the Hejaz and to use the desert for mobility. However, core competencies lose their value when the context changes. When in Palestine, the operational environment had changed due to the high density of Turkish troops. “The Arabs could no longer rely upon the desert to protect them and the local populace lacked the protection offered by a nomadic life.”<sup>154</sup> The Bedouins could still conduct raids, but without the core competency of desert capability, they would not be effective when they entered more urban areas. The Bedouins in the Arab Revolt examples the use of a core competency, its internal structure, its cultural path dependence, its application in an operational approach, and competency erosion in a changing environment.

### The Yom Kippur War

The Arab Israeli War of 1973 demonstrates the risks adhering to old core competencies that become core rigidities, the need for multiple capabilities to adapt quickly, developing a strategy based on core competencies, and the risk of veering off that strategy. It is also a valuable example for understanding the important role of institutional training, leader, and capability

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<sup>152</sup> Lawrence, *Evolution of a Revolt*, 14.

<sup>153</sup> Moores, “T.E. Lawrence,” 18.

<sup>154</sup> *Ibid.*, 33.

development. These capabilities, when built into competencies and properly leveraged, created characteristics in the fighting forces that affected the outcome of the conflict.

With his diplomatic efforts unfulfilled, Anwar Sadat turned to a military option for a solution. A survey of Egyptian and Israeli strengths and weaknesses determined the strategy for Egyptian forces. The Egyptians concluded that they performed poorly in mobile warfare, poorly in maneuver battles, but were relatively successful when fighting from fixed defenses. Although reforms integrated better officers and non-commissioned officers, cultural aspects drove the development of highly scripted and rehearsed preparations for crossing the Suez Canal and breaching the Bar Lev line. The key to Egypt's military achievement was the excellent preparation of the army for the war, as well as the fact that the Egyptian strategy combined limited territorial goals with maximal employment of force. Prudent and detailed planning were the main cause for the Egyptian success.<sup>155</sup>

Egyptians built a competency in rehearsed clockwork combined arms operations that outpaced the Israeli's reactions and capitalizing on capabilities that Israel did not have. They were also proficient in establishing fixed defensive positions incorporating anti-armor and anti-air defenses. In order to counteract the Israeli Air Force, the Soviet-Arab concept employed a total air defense system which moved with the attacking force and, at least in the early stages of the war, succeeded in denying the battle area to the Israeli Air Force - inflicted heavy losses on the IAF - and minimized the effectiveness of IAF close air support.<sup>156</sup>

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<sup>155</sup> Uri Bar-Joseph, "Strategic Surprise or Fundamental Flaws? The Sources of Israel's Military Defeat at the Beginning of the 1973 War," *The Journal of Military History* 72, no. 2 (April 2008), 513.

<sup>156</sup> William E. DePuy, "Letter to General Creighton W. Abrams," 14 January 1974, in *Selected Papers of General William E. DePuy*, compiled by Richard M. Swain (Fort Leavenworth, KS: Combat Studies Institute, 1994), 70.

The Bar Lev line was undermanned by Israeli soldiers that lacked in professional training and preparation. Egyptians used water cannons to breach berms and rubber boats to transfer 32,000 troops during the first hours of the war without any resistance. Once across, they established intricate defensive positions supported by minefields, interlocking fire, automatic weapons, anti-armor, mortars, and artillery. Egyptian forces' success came from four factors: surprise, Israeli lack of preparedness, Egyptian antitank and antiaircraft tactics, and the all-encompassing script; however, they were unable to adapt to Israeli maneuver.

The Egyptians use of their core competencies capitalized on the situation on the Bar Lev line. "Strategic surprise rather than fundamental weaknesses was the independent variable that doomed the outcome of the war in its initial stage."<sup>157</sup> However, when the Egyptian force pressed an attack across the Sinai, out from their defensive positions and the protection of their air defenses, without incorporating their core competency in clockwork rehearsals, they failed to conduct proper combined arms operations.

The Israeli experience on the Sinai front demonstrates the pitfall of core rigidities. Edward Luttwak best summed up the logic of an unsuccessful military endeavor when he said, "The reason that something might not work the next time is precisely because it worked the last time."<sup>158</sup> What were the sources of competitive advantage for the Israelis during the Six Day War in 1967 became a source of failure until they adapted to the tactics of the Egyptian forces in 1973. "Following the war of 1967, the IDF allocated most of its resources to air power and tank forces at the expense of other elements, primarily the infantry, artillery, and combat engineering."<sup>159</sup> In 1973, the Israeli Army initially counterattacked relying almost exclusively on tanks and fighter

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<sup>157</sup> Bar-Joseph, "Strategic Surprise," 530.

<sup>158</sup> Edward Luttwak, *Strategy: The Logic of War and Peace* (Cambridge, 1987), quoted in Rudesheim, pg. 12.

<sup>159</sup> Bar-Joseph, "Strategic Surprise," 513.

aircraft, with high casualties and little result. Their core competency from 1967 failed them, and they had to learn that armor must be integrated with infantry, artillery, and air defenses.<sup>160</sup> Israel adapted quickly to the Egyptians and used combined arms to defeat the capability gap, especially when the Egyptian forces deviated from their initially successful approach.

This conflict provided critical insight into competencies: sustainability, adaptability, structure of competencies, and the importance of culture. This case demonstrates that core competencies need to sustain competitive advantages across a wide range of markets (situations). Tactical military operations change quickly and require a mix of capabilities that do not allow for routines to establish sustainability. Success at tactics may be the result of core competencies found in the systems and routines that are built into an organization that support tactical operations: communications, command and control, or operational adaptability. One of the IDF's true core competencies may have been its institutional training programs that produced tank crews with excellent gunnery skills.

At the time, the US Army concluded that military equipment was virtually the same for both sides. The difference was in the training, the leadership, the motivation, the courage, and the flexibility – the skill, tactical and technical on the battlefield.<sup>161</sup> These are the intangible components of core competencies that are just as important, and sometimes more so, than the tangible weapon systems. Because they were defending their homeland, Israeli forces “took risks which few other soldiers would have been prepared to face, and, although boldness did not always pay, more often than not it did.”<sup>162</sup>

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<sup>160</sup> William E. DePuy, "Implications of the Middle East War on US Army Tactics, Doctrine and Systems," in *Selected Papers of General William E. DePuy*, compiled by Richard M. Swain (Fort Leavenworth, KS: Combat Studies Institute, 1994), 88.

<sup>161</sup> *Ibid.*, 114.

<sup>162</sup> Michael Carver, “Conventional Warfare in the Nuclear Age” in Peter Paret, ed. *Makers of Modern Strategy: from Machiavelli to the Nuclear Age* (Princeton, NJ: Princeton

## Conclusion

Identifying core competencies is just as critical for the military as it is for businesses; however, the context of the competition, the environment, and other variables requires some adaptation of the core competency theory. The Army has wrestled with properly identifying its core competencies, often muddling them with individual competencies, unit functions, or mission essential tasks. When Prahalad and Hamel introduced ‘core competencies,’ and DoD emphasized this in the 1990s, the lack of a thorough understanding of the theory led to misunderstanding and misapplication in the Army. Regulatory requirements, joint doctrine, and a concepts driven capability-based planning system for force development has driven the Army to identify motivational narratives as core competencies.

Currently, the Army is misidentifying core competencies based on a desire to emphasize organizational combat-related concepts.<sup>163</sup> CAM and WAS are not core competencies when evaluated against the business theory, but are best described as organizational level capabilities or meta-competencies. The Army should adopt the business theory and rigorous techniques for competency identification to ensure it is building and leveraging the most valuable capabilities to achieve operational and strategic objectives. Empirical evidence in business and the examples of the Bedouins, Egyptians, and Israelis demonstrate that competencies are found deep inside organizations where proficiency in routines creates advantages in the organization’s products and services.

CAM and WAS fulfill organizational motivational narratives that also conveniently support an acquisition process. However, to find the actual core competencies, it is necessary to look deeper, to ask “how” more often, and to relate capabilities to the specific environment. Loss

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University Press, 1986):779-814, 798.

<sup>163</sup> Grant, “Resource-Based Theory,” 121.



of a core competency or capability can render an organization dysfunctional because they permit organizational leveraging of other capabilities across a wide range of markets.<sup>164</sup> Core competencies are what organization possess, representing unique features to the organizations services and products, but they are not what an organization does.

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<sup>164</sup> Appleton, "Failures in Understanding," 21.

## CONCLUSION

Identifying core competencies requires a thorough understanding of the business theory that was created when businesses switched to this inside-out approach. So far, the Army has retained an outcome-based perspective and instead adopted ill structured abstract narratives describing the two primary aims in conflict. The Army's inability to adopt core competency management practices resulted from a lack of theory comprehension; US Code, DoD, and joint requirements; and its own conceptual doctrine development. The issue for the Army is how it should, either as an institutional Army or as an operational force, proceed to identify its tangible and intangible assets that are the sources of competitive advantage.<sup>165</sup>

Because the nation faces the challenges of uncertain security environment, and it is not capable of funding every capability, changes to US Code, DoD, and Joint Doctrine have created a capabilities-based process to identify, build, and leverage capabilities.<sup>166</sup> Alignment of these capabilities requires a strategy that provides clear guidance for all decision making within the Department, indicating where to focus limited resources to achieve U.S. security objectives.<sup>167</sup> However, the DoD approach instead created category groups of capability areas, failed to link capabilities to missions, inadequately included combatant commander input, and installed illogical requirements in readiness reporting.

Within this framework, and with little academic or empirical research, the Army attempted to identify its capabilities that create the greatest competitive advantage in its contributions to the joint force. Without a method for identification, the Army created the two concepts of CAM and WAS that did not meet the definition, characteristics, or structure of core

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<sup>165</sup> Grant, "Resource-Based Theory," 122.

<sup>166</sup> DoD, *QDR* (2009), 4.

<sup>167</sup> Matisoo, "Enabling Joint Interdependence," 74.

competencies. Instead of utilizing the business theory, the Army developed buzzword meta-competencies that ‘fit’ every situation. This monograph recommends translating core competency theory, its definitions, descriptions, and its methods into Army concepts and doctrine for organizations to understand how to apply its principles. For the identification of core competencies in any organization or activity, this monograph recommends using the consensus process introduced by Kenneth Marino.<sup>168</sup> Each of the eight steps of the process leverages other related analytical methods such as the DoD Architecture Framework and Capability-Based Assessments. Army organizations must make assessments of competitive advantage based on measures of effectiveness to determine which of these are making the greatest contributions and then leverage them to enable operational capabilities.

Applying this theory into a military service requires translating the definitions, characteristics, and traits as well as developing a usable method for identification. DoD and the Army have been moving towards a stronger capabilities-based system using the term ‘core competencies.’ The correct place for Army service-wide core competencies in doctrine is in ADP 1, *The Army*. However, creating operational core competencies and writing them into operational doctrine is counterproductive to capability development and the design of operational approaches. The Army core competencies of CAM and WAS do not represent the essential and enduring capabilities that define the fundamental contributions of the Army in the national security environment nor do they enhance the ability to develop operational approaches. These abstractions do not share the same benefits as actual core competencies to assist the Army in decision making or strategy development.

The Army’s difficulty in identifying core competencies indicates the need for developing the theory that includes definitions and methods. If the Army can correctly identify its core

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<sup>168</sup> Marino, “Developing Consensus,” 44.

competencies, it can better design strategies and operational approaches that capitalize on organizational strengths, unify actions across functional areas, make better decisions on the use of resources, integrate the use of technologies in processes, focus training and leader development, and enhance image and vision.

## BIBLIOGRAPHY

- Appleton, Stephen Brent. "The U.S. and Canadian Army Strategies: Failures in Understanding." Research Paper, Strategic Studies Institute, USAWC, 2003.
- Bar-Joseph, Uri. "Strategic Surprise or Fundamental Flaws? The Sources of Israel's Military Defeat at the Beginning of the 1973 War." *The Journal of Military History* 72, no. 2 (April 2008): 509-530.
- Barney, Jay B. "Looking Inside for Competitive Advantage." *The Academy of Management Executive* 9, no. 4 (1995): 49-61.
- . "Strategic Factor Markets: Expectations, Luck, and Business Strategy." *Management Science (1986-1998)* 32, no. 10 (1986): 1231-1242.
- Barney, Jay B., and Delwyn N. Clark. *Resource-Based Theory: Creating and Sustaining Competitive Advantage*. New York: Oxford University Press, 2007.
- Bogner, William C., and Howard Thomas. "Core Competence and Competitive Advantage: A Model and Illustrative Evidence from the Pharmaceutical Industry." Faculty Working Paper, University of Illinois at Urbana-Champaign, 1992.
- Botters, Robert J. "The Proliferation of Peace Operations and U.S. Army Tactical Proficiency: Will The Army Remain a Combat Ready Force?" Monograph, School of Advanced Military Studies, 1996.
- Brown, Bradford. *Defense Acquisition University: Introduction to Defense Acquisition Management*. 10th ed. Fort Belvoir, VA: Defense Acquisition University Press, 2010.
- Carver, Michael. "Conventional Warfare in the Nuclear Age." in *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, edited by Peter Paret. Princeton, NJ: Princeton University Press, 1986. 779-814.
- Center for Strategic and International Studies. *Americas Uncertain Approach to Strategy and Force Planning*. Washington, DC: Center for Strategic and International Studies, 2006.
- Chairman of the Joint Chiefs of Staff. CJCS Instruction 5120.02B, *Joint Doctrine Development System*. Washington, DC: Department of Defense, 2009.
- . Joint Publication No. 3-0, *Joint Operations*. Washington, DC: Department of Defense, 2011.
- . *Joint Vision 2020*. Washington, DC: US Government Printing Office, 2000.
- Clark, J.P. "The Missed Opportunity: A Critique of ADP 3-0, *Unified Land Operations*." *Military Review* (July-August 2012): 46-52
- Clausewitz, Carl von. *On War*, trans. and ed. by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1989.

- Defense Business Board. *Capabilities Requirements Identification and Development Processes Review*. Report to the Secretary of Defense, Report FY09-2. Washington, DC: Defense Business Board, 2008.
- . *Next Steps on DoD Core Competency Review Task Group*. Washington, DC: Defense Business Board, 2003.
- Dempsey, Martin E. *Capstone Concept for Joint Operations: Joint Force 2020*. Washington, DC: Department of Defense, 2012.
- . "Gen. Martin Dempsey on the Army Operating Concept." Presentation, YouTube, 9 September, 2010, <https://www.youtube.com/watch?v=MWMym8yNT9Y&list=PLc4c2Aos-Xcga0v4j8yRKqvKLeWPZXTyZ>, (accessed 12 December 2012).
- Department of the Army. Army Doctrine Publication No. 1, *The Army*. Washington, DC: Department of the Army, 2012.
- . Army Doctrine Publication No. 3-0, *Unified Land Operations*. Washington, DC: Department of the Army, 2011.
- . Army Doctrine Reference Publication 2-0, *Intelligence*. Washington, DC: Department of the Army, 2012.
- . Army Doctrine Reference Publication 3-0, *Unified Land Operations*. Washington, DC: Department of the Army, 2012.
- . Army Doctrine Reference Publication 3-09, *Fires*. Washington, DC: Department of the Army, 2012.
- . *The United States Army 2004 Posture Statement*. Washington, DC: Office of the Chief of Staff U.S. Army, 2004.
- . *The United States Army 2009 Posture Statement*. Washington, DC: Office of the Chief of Staff U.S. Army, 2009.
- . *The United States Army 2011 Posture Statement*. Washington, DC: Office of the Chief of Staff U.S. Army, 2011.
- . G-8. *Army Equipment Modernization Strategy*. Washington, DC: Department of the Army, 2013.
- DePuy, William E. *Selected Papers of General William E. DePuy* compiled by Richard M. Swain. Fort Leavenworth, KS: Combat Studies Institute, 1994.
- Doz, Yves. "Core Competency for Corporate Renewal: Towards a Managerial Theory of Core Competencies." in *Core Competency-Based Strategy*, edited by Campbell, Andrew, and Kathleem Sommers Luchs. Boston: International Thomson Business Press, 1997.

- Drejer, Anders. "Organisational Learning and Competence Development." *The Learning Organization* 7, no. 4 (2000): 206-220.
- Driel, van Hugo., and Wilfred Dolfsma. "Path Dependence, Initial Conditions, and Routines in Organizations: The Toyota Production System Re-examined." *Journal of Organizational Change* 22, no. 1 (2009): 49-72.
- Edgar, William B., and Chris A. Lockwood. "Understanding, Finding, and Applying Core Competencies: A Framework, Guide, and Description for Corporate Managers and Research Professionals." *Academy of Strategic Management Journal* 10, no. 2 (2011): 61-82.
- Emiliani, M. L., and D. J. Stec. "Using Value-Stream Maps to Improve Leadership." *Leadership & Organizational Development Journal* 25, no. 8 (2004): 622-645.
- Fukuyama, Francis, and Abram N. Shulsky. "Military Organization in the Information Age: Lessons from the World of Business." in *Strategic Appraisal: The Changing Role of Information in Warfare*, edited by Khalilzad, Zalmay, and John White, and Andy W. Marshall. Santa Monica, CA: Rand Corporation, 1999.
- Gat, Azar. *A History of Military Thought: From the Enlightenment to the Cold War*. New York: Oxford University Press, 2001.
- Gawrych, George W. *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*. Fort Leavenworth, KS: Combat Studies Institute, 1996.
- Gharajedaghi, Jamshid. *Systems Thinking: Managing Chaos and Complexity: a Platform for Designing Business Architecture*. 3rd ed. Burlington, MA: Morgan Kaufmann, 2011.
- Goddard, Jules. "The architecture of core competence." *Business Strategy Review* 8, no. 1 (Spring 1997): 43-52.
- Grant, Robert M. "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation." *California Management Review* 33, no. 3 (Spring 1991): 114-135.
- Hall, Richard. "A Framework Linking Intangible Resources and Capabilities to Sustainable Competitive Advantage." *Strategic Management Journal* 14, no. 8 (1993), 607-618.
- Hamel, Gary., and Aime Heene, eds. *Competence-Based Competition*. New York: John Wiley & Sons Ltd, 1994.
- Hamel, Gary., and C.K. Prahalad. "The Concept of Core Competence," in *Competence-Based Competition*. edited by Gary Hamel and Aime Heene. New York: John Wiley & Sons Ltd, 1994.
- Hamre, John J. "Roles, Missions, and Requirements of the Department of Defense." testimony before the House Armed Services Committee, Washington, DC, June 19, 2007.

- Horton, Sylvia. "Introduction - the Competency Movement: Its Origins and Impact on the Public Sector." *The International Journal of Public Sector Management* 13, no. 4 (2000): 306-18.
- House of Representatives. *National Defense Authorization Act for Fiscal Year 2008, Conference Report to accompany H.R. 1585*. Washington, DC: US Government Printing Office, 2007.
- Institute for Defense Analysis. *Military Roles and Missions: Past Revisions and Future Prospects*. Alexandria, VA: Institute for Defense Analysis, March 2009.
- Joint Chiefs of Staff, J-8. *Capabilities-Based Assessment (CBA) User's Guide, Version 3*. Washington, DC: Force Structure, Resources, and Assessments Directorate (JCS J-8), 2009.
- Katkalo, Valery S., and Christos N. Pitelis, and David J. Teece. "Introduction: On the Nature and Scope of Dynamic Capabilities," *Industrial and Corporate Change* 19, no. 4 (2010): 1175-1186.
- Keenan, Robert. *Capabilities Development and Systems Acquisition Management 2013 Executive Primer*. ver. 18.0. Fort Belvoir, VA: Army Force Management School, February 2013.
- Khade, Alan S., and Nathan Lovaas. "Improving Supply Chain Performance: A Case of Wal-Mart's Logistics." *International Journal of Business Strategy* 9, no. 1 (2009): 157-164.
- Klein, Jeremy. "Beyond Competitive Advantage." *Strategic Change* 11, no. 6 (Sep/Oct 2002): 317-327.
- Klein, Jeremy, and David Gee, and Howard Jones. "Analysing Clusters Of Skills In R&D--Core Competencies, Metaphors, Visualization, and the Role of IT." *R&D Management* 28, no. 1 (January 1998): 37-42.
- Krogh, Georg von, and Johan Roos. "A Perspective on Knowledge, Competence, and Strategy" *Personnel Review* 24, no. 3 (1995): 56-76.
- Lawrence, T. E. *Evolution of a Revolt*. Fort Leavenworth, KS: Combat Studies Institute, 1990, <http://server16040.contentdm.oclc.org/u?p4013coll7>, (accessed 1 April 2013).
- . *Seven Pillars of Wisdom: A Triumph*. New York: Anchor Books, 1991.
- Lippman, S. A., and R. P. Rumelt. "Uncertain Imitability: An Analysis of Interfirm Differences in Efficiency under Competition." *Bell Journal of Economics* (1982): 418-438.
- Marino, Kenneth E. "Developing Consensus on Firm Competencies and Capabilities." *The Academy of Management Executive* 10, no. 3 (Aug 1996): 40-51.
- Martens, Rudy, and Ilse Bogaert, and Andre Van Cauwenbergh. "Preparing for the Future as a Situational Puzzle: The Fit of Strategic Assets." *International Studies of Management & Organization* 27, no. 2 (1997): 7-20.



- Matisoo, Peter W. "Enabling Joint Interdependence through Capability Portfolio Management." Master's Thesis, Joint Forces Staff College, Joint Advanced Warfighting School, 2008.
- Moore, Lawrence W. "T. E. Lawrence: Theorist and Campaign Planner." Monograph, School of Advanced Military Studies, 1992.
- Nocks, Andrew B. "More Mumbo-Jumbo: The Clutter and Confusion within the Army's Operational Concept of Unified Land Operations." *Small Wars Journal* (June 8, 2012) <http://smallwarsjournal.com/jrnl/art/more-mumbo-jumbo-the-clutter-and-confusion-within-the-army%E2%80%99s-operational-concept-of-unified> (accessed 12 December 2012).
- Prahalad, C.K., and Gary Hamel. "The Core Competence of the Corporation." *Harvard Business Review* 68, no. 3 (May-June 1990): 79-91.
- Rudesheim, Fredrick S. "Discovering the Army's Core Competencies." Strategy Research Project, U.S. Army War College, 2001.
- Rumelt, Richard P. forward to *Competence-Based Competition*, edited by Gary Hamel and Aime Heene. New York: John Wiley & Sons Ltd, 1994.
- Teece, David J., and Gary Pisano, and Amy Shuen. "Dynamic Capabilities and Strategic Management." *Strategic Management Journal* 18, no. 7 (1997): 509-533.
- United States General Accounting Office. *Defense Acquisitions: DoD's Requirements Determination Process Has Not Been Effective in Prioritizing Joint Capabilities*. Washington, DC: United States General Accounting Office, 2008.
- . *Defense Management: DoD Faces Challenges Implementing Its Core Competency Approach and A-76 Competitions*. Washington, DC: United States General Accounting Office, 2003.
- U.S. Army Training and Doctrine Command. Pamphlet 525-3-0. *The U.S. Army Capstone Concept*. Fort Eustis: Training and Doctrine Command, 2009.
- . Pamphlet 525-3-0. *The U.S. Army Capstone Concept*. Fort Eustis: Training and Doctrine Command, 2012.
- . Pamphlet 525-3-1. *The U.S. Army Operating Concept*. Fort Eustis: Training and Doctrine Command, 2009.
- . *The U.S. Army Training and Doctrine Command Concept Development Guide*. Fort Eustis: Training and Doctrine Command, 2011.
- . TRADOC Regulation 10-5, *Organization and Functions: U.S. Army Training and Doctrine Command*. Fort Monroe, VA: Training and Doctrine Command, 2009.
- . TRADOC Regulation 10-5-6, *Organization and Functions: United States Army War College*. Fort Monroe, VA: Training and Doctrine Command, 2005.

- U.S. Army War College. *How the Army Runs: A Senior Leader Reference Handbook 2011-2012*. Carlisle, PA: U.S. Army War College, 2012.
- U.S. Department of Defense. *Defense Budget Priorities and Choices*. Washington, DC: Department of Defense, January 2012.
- . Department of Defense Directive 5100.01p. *Functions of the Department of Defense and Its Major Components*. Washington, DC: Department of Defense, 2010.
- . Department of Defense Directive 7730.65. *Department of Defense Readiness Reporting System (DRRS)*. Washington, DC: Department of Defense, 2007.
- . *Department of Defense Plan for Streamlining the Bureaucracy*. Washington, DC: Department of Defense, 1993.
- . *Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces*. Washington, DC: Department of Defense, 1995.
- . *Joint Capabilities Study: Improving DoD Strategic Planning, Resourcing and Execution to Satisfy Joint Capabilities*. Washington, DC: Department of Defense, 2004.
- . *Quadrennial Defense Review Report*. Washington, DC: Department of Defense, 2001.
- . *Quadrennial Roles and Missions Review Report*. Washington, DC: Department of Defense, 2009.
- . *Report of the Defense Science Board on Outsourcing and Privatization*. Washington, DC: Office of the Under Secretary of Defense for Acquisition and Technology, 1996.
- . *Report of the Quadrennial Defense Review*. Washington, DC: Department of Defense, 1997.
- . *Sustaining U.S. Global Leadership: Priorities for 21<sup>st</sup> Century Defense*. Washington, DC: Department of Defense, 2012.
- . *Transformation Planning Guidance*. Washington, DC: Department of Defense, 2003.
- U.S. Joint Forces Command. *The Joint Operating Environment (JOE) 2010*. Suffolk, VA: Joint Forces Command, 2010.
- Wang, Catherine L., and Pervaiz K Ahmed. "Dynamic Capabilities: A Review and Research Agenda." *The International Journal of Management Review* 9, no. 1 (2007): 31-51.
- Wass de Czege, Huba. "Closing With the Enemy: The Core Competency of an Army." *Military Review* 80, no. 3 (May-June 2000): 8-10.
- Williams, Robert M. "Maintaining Armor Core Competencies." *Armor* 116, no. 1 (Jan/Feb 2007): 4.
- Zhang, YanBing. "Development of a Structured Framework for Core Competence Evaluation in the Manufacturing and Service Industries." PhD diss., Sheffield Hallam University, 1999.

Zook, Aaron M. "Military Competency-Based Human Capital Management: A Step Toward the Future." Strategy Research Project, U.S. Army War College, 2006.