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The Applicability and Complementarity of Manoeuvre Warfare Doctrine to Dynamic Capability Theory

A Master's Thesis submitted for the degree of "Master of Business Administration"

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Affidavit

- I, Michael Thomas Faber, hereby declare
 - that I am the sole author of the present Master's Thesis, "The Applicability and Complementarity of Manoeuvre Warfare Doctrine to Dynamic Capability Theory", 29 pages, bound, and that I have not used any source or tool other than those referenced or any other illicit aid or tool, and
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Abstract

As Western military deployments in Iraq and Afghanistan come to an end, there is an increasing number of combat veterans leaving the military and seeking employment in the private sector. To date, little research has been conducted on whether military skills, and warfighting experience in particular, is relevant to the business sector and management therein. This study postulates that business strategy and military doctrine share several commonalities and complementarities. Through the examination and comparison of business to military strategy, and dynamic capability theory, and manoeuvre warfare doctrine in particular, it is concluded that combat veterans possess many of the key experiences and skills needed in dynamic marketplaces. Manoeuvre doctrine is a competitive strategy, and dynamic decision-making is the combat leader's competitive advantage; as such, their decision-making skills constitute a valuable managerial resource for firms seeking to enhance their dynamic capabilities and organizational agility. This study is of interest to hiring managers in the private sector as well as to veterans seeking to translate their military experience into successful employment in the business sector, notably in managerial positions.

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1. Introduction

As Western military deployments in Iraq and Afghanistan wind down, there is an increasing number of combat veterans leaving the military and entering the private sector. Yet, it is not clear that military experience, and warfighting knowledge in particular, is relevant to the business sector, management in particular. Upon closer examination, business strategy and military doctrine do share a number of commonalities and complementarities.

From the business angle, *dynamic capability theory* says three things: first, the competitive environment is not static but rather dynamic, in that the requirements to be competitive and successful are constantly evolving. Second, in order to remain competitive in a dynamic environment, a firm must be adaptive. Third, *dynamic managerial capabilities*, and specifically decision-making, plays a crucial role in developing organizational adaptivity.

From the militarist angle, *manoeuvre warfare* doctrine argues very much along the same lines as dynamic capability theory in that it counts the competitive environment, war, as dynamic in nature, and that force alone is seldom enough to succeed. It equally recommends how to generate and exploit opportunities within the dynamic environment. According to manoeuvre doctrine, the best way to generate opportunities is via a superior decision-making process, which in military parlance, is *command* and control.

Military command and control is characteristically decentralized, and is highly responsive to the uncertainty and change inherent in its operating environment. In fact, decentralized command and control is touted as one of the greatest advances in modern warfare.

This study hypothesizes that combat veterans posses this dynamic decision-making capability, and as such, constitute a valuable managerial resource for firms seeking to enhance their dynamic capabilities and organizational agility. This study will examine various business strategies that contribute to making this point, with a focus on dynamic capabilities and dynamic managerial capabilities. Further manoeuvre warfare doctrine and particularly the command and control framework are explored regarding their relevance to business strategy.

2. Business Strategy Theory

One of the fundamental characteristics of business economics is the inherent dynamism of the marketplace, as it is subject to changes in consumer demand, innovations in technology and increased market competition. In order to adapt to the particularities of a dynamic marketplace, various theories have been postulated to describe and explain the needs of a firm.

2.1 Economics-Based Strategy and Competitive Advantage

The fundamental goal of economics-based strategy is to organize firm activity in order to maximize its economic effectiveness, typically referred to as "profits." A firm is able to achieve economic rents by obtaining an attribute or series of attributes that are aligned with environmental realities and thus satisfy consumer demand. When a firm is better aligned than its competitors at meeting marketplace demands it is said to possess a competitive advantage. Business strategists have identified three approaches for achieving a competitive advantage. The first approach, a strategizing approach, involves capturing rents through market positioning and organizing factors external to the firm, which is to say, offer a solution where previously one has not existed. The second approach, called the competitive success approach, involves creating wealth through firm productivity and organizing internal firm resources, to offer a better alternative than current solutions. Both these approaches, however, are based on the presumption of a static environment, whereby the environment does not change. In reality, the environment is continuously changing as consumer demands change, competitors' ability to meet consumer demand improves, and competition intensifies. Responding to environmental change is captured in the third approach, the dynamic theory approach, as it speaks to the requirement for firm adaptiveness and such adaptation through organizational learning.

The strategizing approach holds as its central premise a firm's need to position itself within the market in such a way as to limit its exposure to competition. In the simplest of terms it explains that markets with little competition are the most attractive, and so a firm's strategy should be to pursue markets with the greatest opportunity. This approach includes the competitive forces and the strategic conflict theories, and has become synonymous with Porter's five forces.³ This approach is characterized by strategic leaps in technology and radical innovation. Culturally speaking, this is the preferred

¹ Teece, et al. 1997. Pg. 509.

² Nelson. R. and S. Winter. 1982.

³ Porter, M.E. 1980.

approach of American firms.⁴ The major limitation of this strategy is that the competitive advantage achieved is short lived, as competition intensifies as a result of product imitation, substitution and irrelevance.

The competitive success approach argues that a firm's competitive advantage is its productivity growth, and its productivity is determined by its resource management. This approach emphasizes the role that organizational capability plays in firm performance, and identifies knowledge management and routinization as the basis for achieving competitive advantage. This approach is developed in resource-based theory and knowledge-based theory. Firm performance is based on rapid, incremental innovation, and culturally speaking, this is the preferred strategic approach of Japanese and German firms. The competitive advantage achieved with this approach is longer lived than that of the strategizing approach; however, it is not responsive to environmental changes such as changes in consumer preferences or the introduction of radical innovation, and thus does not constitute a sustainable competitive advantage.

The basic premise of the dynamic approach is that competitive success is the result of surviving environmental change. A firm is able to survive environmental change through a series of steps that notably include anticipating and solving future problems, and also by being responsive and adaptive to change. The dynamic theory approach lays out a framework for how efficiency-driven performance firms should evolve. Furthermore, it is particularly relevant in innovation-based sectors of the economy. Culturally speaking, this is the approach observed in Japanese firms. Theorists hold this approach to offer the most sustainable competitive advantage theory to date, as it encourages alignment with environmental change.

2.2 Dynamic Capabilities Theory

Dynamic capabilities theory is about adaptability. It theorizes that environmental change is an inevitable constant in business, and for firms to remain stable and competitive they too must change in

⁴ Teece, et al. 1997. Pg. 509.

⁵ Teece, et al. 1997, Pg. 509.

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⁷ Nonaka, I. and H. Takeuchi. 1995.

order to sustain environmental alignment. The theory further explains that a firm's performance, and thus its competitive advantage, is limited by its ability to adapt to changes occurring both internally and externally to the organization. Adaptability refers to a firm's ability to make good decisions, act quickly, and have the flexibility to respond to change and unforeseen developments. As Augier and Teece explain, dynamic capabilities are "the processes of opportunity sensing and seizing, as well as the processes of strategic renewal."

Dynamic capabilities theory follows the competitive success approach in that it holds productivity as key to a firm's competitiveness, and it builds upon resource-based theory. Whereas the resource-based view considers only the internal organization factors, dynamic capabilities (DCAP) theory includes both internal and external factors in its framework.

DCAP holds that the way to maximize profits is by turning a short term competitive advantage into a longer term competitive advantage, and the way to do so is by leveraging asset complementarities. Leveraging complementarities is a three-step process: first, sense the new opportunity; second, seize the opportunity; and finally, align organizational resources accordingly.

The DCAP framework is built on the assumptions of resource-based theory and knowledge-based theory, but it extends beyond both these theories. The two theories explain that organizations sense and seize opportunity through knowledge creation and routinization. These theories, however, explain organizing economic activity in a static environment, which supposes that technology and consumer preferences do not change, and that once resources are organized there is no need to change them. It is in this area that DCAP extends beyond the two preceding theories, explaining that the environment is actually dynamic in nature, thereby requiring a need for resource realignment and renewal, and thus introduces dynamism into the framework for achieving competitive advantage.

The DCAP framework accounts for change by introducing the need for strategic renewal of both assets and competences. Renewal is about realignment of firm effort to build and exploit knowledge assets into new lines of business. DCAP involves a double-loop knowledge process: first, a firm learns how to do something, developing a competence; next it evaluates whether the knowledge learned is better applied to a new area where higher economic rents can be realized.

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⁸ Augier, M. and D. Teece. 2009. Pg. 410.

The knowledge process in the DCAP framework is an active process and a defining characteristic. Here, a firm actively seeks out the knowledge it requires to remain competitive rather than looking to be competitive based on the knowledge it already possesses.

DCAP involves learning management, process management, innovation management, and leadership. Learning improves organizational knowledge and cognition, which enhances a firm's ability to sense opportunities, and facilitates good decision-making. Process management improves the firm's ability to apply decisions quickly and integrate firm knowledge to seize opportunities. Innovation is what allows the firm to react to change proactively. It involves identifying potential problems before they arise, developing appropriate solutions, and realigning resources accordingly.

Lastly, DCAP involves leadership both at the managerial level and more importantly at the strategic level. The leaders are the architects of a firm's DCAP. They establish the structures and behaviors that foster organizational capabilities. They internalize and translate vision into action, and they articulate current capabilities into future opportunities. Finally, they mobilize resources to convert ideas into action.⁹

2.3 Dynamic Managerial Capability

In addition to the organizational factors of DCAP, a managerial factor called managerial dynamic capability has been identified. Where DCAP is a firm's ability to retain environmental alignment amidst change, dynamic managerial capability (DMCAP) is the ability of managers to make decisions as to the correct course of action required to retain alignment in circumstances of uncertainty. Without effective managerial decision-making, organizational dynamism is not possible.

Adner and Helfat define dynamic managerial capabilities as "the capabilities with which managers build, integrate, and reconfigure organizational resources and competences," which builds on Teece et al's definition that "dynamic capabilities build, integrate, or reconfigure operational

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⁹ Teece, *et al.* 1997.

¹⁰ Adner, R. and C. Helfat. 2003. Pg 1020.

capabilities." Helfat and Petraf further add that dynamic capabilities do not directly affect output but rather indirectly contribute to output through impact on operational capabilities. ¹¹

The essence of DMCAP is guidance on how an organization should cope with change. While applicable for all levels of management, it is most critical at the top levels. It accounts for a "nontrivial portion of the variance of firm performance," and is known as "CEO effect." In fact, the CEO effect accounts for an increasingly large portion of the variance in firm performance, from an average of 12.7 percent from 1950-1969 to an average of 25 percent from 1990-2009. An example of CEO impact in regards to strategic change is the semiconductor industry, where variance in firm performance is the result of managerial decision-making.

Though the CEO effect best exemplifies the impact of DMCAP, as a concept it applies at both business-level and corporate-level management.¹⁵

DMCAP is comprised of three activities: sensing, seizing, and reconfiguring¹⁶. There are different cognitive capabilities that support each of these activities; for sensing, perception and attention are the two associated capabilities; problem-solving and reasoning are associated with seizing; while language and communication, as well as social cognition, are associated with reconfiguration.

Sensing is the critical component of DMCAP whereby a firm is able to recognize opportunities before they become obvious. Sensing involves not only the recognition of opportunities but equally involves the anticipation of threats and the creation of opportunity in uncertain environments. In order to sense environmental change and opportunity, an individual relies on two distinctive cognitive capabilities: perception and attention. Perception involves the organization and construction of information into a useful format, and is related to data interpretation and pattern recognition.

¹³ Quigley, T. and D. Hambrick. 2011. *Macrosocietal Changes and Executive Effects on Firm Performance: A New Explanation for the Great Rise in Attributions of CEO Significance, 1950-2009*, as cited in Helfat, C. and M. Peteraf. 2014. Pg. 2.

¹¹ Helfat, C. and M. Peteraf. 2014.

¹² Ibid. Pg 2

¹⁴ Holbrook et al., 2000. The Nature, Sources, and Consequences of Firm Differences in the Early History of the Semiconductor Industry, as cited in Helfat, C. and M. Peteraf. 2014. Pg. 3.

¹⁵ Adner, R. and C. Helfat. 2003. Pg. 1020.

¹⁶ Augier, M. and D. Teece. 2009. Pg. 410.

Experience plays a decisive role in forming an individual's perception, where interpretation and pattern recognition is guided by one's previous experiences, existing information and beliefs. Experience —which is to say practice/repetition- enables early pattern recognition as well as more timely and effective responses.

Attention, which is "a state of focused awareness on a subset of available perceptual information,"¹⁷ is critical for perception. There are three functions of attention, and they enable perception processing. These functions are: orienting to sensory events, detecting signals for conscious processing, and maintaining vigilance. 18 Simply put, perception enables recognition and attention facilitates detection of threats and opportunities. Because practice improves cognitive capabilities, managers with more experience can contribute to organizational performance achievement more so than can ones with less.

The second pillar of DMCAP is seizing, which entails capturing opportunities and responding to threats. The related cognitive capabilities are problem-solving and reasoning, where problem-solving involves finding solutions that advance one's position from the current situation to a desired state, and reasoning involves the evaluation of information to a solution based on the application of logic, rules or procedure. Additionally, seizing capacities typically rely on heuristic processing methods designed to develop approximated answers quickly and without extensive analysis such as "rules of thumb," short cuts, guessing and working backwards. Such methods allow for solving both ill-defined problems as well as well-defined but complex problems. 19 Within the organizational context, these capabilities allow for the development of business models and strategic planning. Finally, these analytical skills guard against the cognitive bias that results from path-dependencies and heterogeneity.²⁰

The third pillar of DMCAP is resource configuration, which is the organization of firm resources and capabilities to pursue opportunities and overcome challenges. Helfat et al. describe this process as "asset orchestration," which they define as "the selection, configuration, alignment, and modification of tangible and intangible assets." ²¹ In addition to acquiring, adapting and reconfiguring assets, this involves overcoming organizational friction, which typically emerges as a result of rigid cognitive frameworks that exist within the organization. Overcoming friction and coordinating the adaptation

¹⁷ American Psychological Association, 2009 as cited in Helfat, C. and M. Peteraf. 2014. Pg 8.

¹⁸ Posner, M. and S. Petersen. 1990, as cited in Helfat, C. and M. Peteraf. 2014. Pg 9.

¹⁹ Kosslyn and Rosenberg, 2006, as cited in Helfat, C. and M. Peteraf. 2014. Pg. 11.

²⁰ Helfat, C. and M. Peteraf. 2014. Pg 11.

²¹ Helfat et al. 2007, as cited in Helfat, C. and M. Peteraf. 2014. Pg 12.

requires communication skills and social cognition. Communication entails the transference of ideas from one party to another, and in the context of managerial cognition has to do with the persuading others to behave in a certain way. Communication is used to achieve organizational alignment and achieve broad, overarching goals. Storytelling and analogies are key instruments for effective managerial communication. Social cognition has to do with fostering cooperation within the organization. The key attribute of social cognition is the ability to understand varying points of view. An ability to understand others increases a manager's ability to influence their behavior, develop trust, and thus foster greater cooperation.

The key takeaways from dynamic theory literature for the purposes of this thesis are as follows:

- The marketplace is a dynamic and chaotic environment. Furthermore, the marketplace is characterized by disorder, friction, and uncertainty as to the rate of technological innovation, future trends and changing consumer preferences.
- 2) There are two ways to remain competitive amidst the environmental dynamism:
 - a. be forward-looking and creative as an organization; and
 - b. be responsive to change.

3. War: A Study in Dynamics

There are certain similarities between war and business, and thus there are relevancies that exist between the two. Manoeuvre doctrine has complementarities with business strategy, as it too explains how to operate and thrive in dynamic environments as well as details the criticality of effective decision-making in organizational adaptability. In order to understand the relevance of military doctrine to business strategy it is worth first reviewing the nature of war and warfighting.

3.1 War: A Dynamic Environment

"War is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty.... The commander must work in a medium which his eyes cannot see; which his best deductive powers cannot always fathom; and with which, because of constant changes, he can rarely become familiar." —Clausewitz²²

²² Clausewitz, *On War*, as cited by Marine Corps Doctrinal Publication 6 (MCDP 6). 1996. Pg. 40.

It is important to examine the nature of war in order to understand its dynamic nature and the challenges it poses. Moreover, an understanding of the nature of war facilitates understanding manoeuvre doctrine, which in turn facilitates an understanding of how it relates so closely to DCAP.

The essence of war is that is it a competition between humans to impose their will upon on another. While there are eight attributes that encompass the nature of war, it can generally be characterized as violent, and filled with friction, uncertainty, risk, fluidity and chaos.²³ War is inherently unpredictable, and even with defined probabilities and possibilities, there will forever remain an element of uncertainty and chance, and therefore risk.

The fundamental attributes of war make it dynamic. Clausewitz described war as "Zweikampf," which translates as "two-struggle," and he analogized the dynamic nature of war as a pair of wrestlers locked in a hold.²⁴ The US Marine Corps (USMC) describes the dynamic nature of war as follows:

War is thus a process of continuous mutual adaptation, of give and take, move and countermove. It is critical to keep in mind that the enemy is not an inanimate object to be acted upon but an independent and animate force with its own objectives and plans. While we try to impose our will on the enemy, he resists us and seeks to impose his own will on us.²⁵

3.2 War: Fighting and Commanding

It is prudent here to briefly explain who fights and commands war, and describe war's laborers and managers.

The US Army defines combat arms as "Units and soldiers who close with and destroy enemy forces or provide firepower and destructive capabilities on the battlefield." The Canadian Forces (CF) define the combat arms as "a colloquial term that refers to a slightly wider description of "combat elements". The CF further defines the combat elements as "those elements that engage the enemy directly. They fight and typically employ direct fire weapons and manoeuvre, and include armour,

²³ Marine Corps Doctrinal Publication 1 (MCDP 1). 1997. Pg.11.

²⁴ Clausewitz, *On War*, cited by Marine Corps Doctrinal Publication 6 (MCDP 1). 1997. Pg. 3.

²⁵ Marine Corps Doctrinal Publication 1 (MCDP 1). 1997. Pg.11.

²⁶ Field Manual 3-90. *Tactics*. 2001. Appendix A.

²⁷ B-GL-300-001/FP-001 *Land Operations*. 2008. Pg. 30.

infantry, and direct fire units. They are considered ground manoeuvre forces."²⁸ In the simplest of terms, it is the combat elements who are the warfighters.

"Leaders" refer to the soldiers and marines who have been given the command authority to make decisions and solve problems, and equally given responsibility to manage warfighting personnel and resources. They are the commissioned and non-commissioned officers within combat units, who have undergone years of both formal and informal managerial and combative training. They have commanded teams in size from ten and up to hundreds of soldiers. Lastly, they are experts in warfighting and leadership.

4. Manoeuvre Warfare: A Dynamic Managerial Capability

4.1 Manoeuvre Warfare Fundamentals

The essence of manoeuvre doctrine is to take action in order to create and exploit an advantage, and the basis of taking said action is the possession of a superior decision-making system. Knowledge, gained through the decision-making process, is leveraged to provide an advantage that is then exploited in view of achieving one's higher objectives and imposing one's will.

Manoeuvre doctrine, therefore, is as much a dynamic decision-making theory as it is a theory of warfighting. In fact, war theory posits that the greater the decision-making capabilities of a military the less it requires violence to achieve its objectives, as so aptly described by both Sun Tzu and Winston Churchill below:

"Thus it is that in war the victorious strategist only seeks battle after the victory has been won, whereas he who is destined to defeat first fights and afterwards looks for victory." -Sun Tzu²⁹

"Battles are won by slaughter and manoeuver. The greater the general, the more he contributes in manoeuver, the less he demands in slaughter." -Winston Churchill³⁰

²⁹ Sun-Tzu, as translated by Roger Ames. 1993. Pg. 93.

³⁰ Churchill, W. *The World Crisis*, vol. 2. Pg. 5. 1923, as cited by Marine Corps Doctrinal Publication 1 (MCDP 1). 1997. Pg. 29.

Decision-making is so central to warfighting and manoeuvre doctrine that the United States Marine Corps list warfighting and dynamic decision-making as their top competencies.³¹ Furthermore, the US Army lists combat and leadership as the core competences of the infantry, where leadership is synonymous with decision-making, and where the infantry are the Land Forces' primary and quintessential warfighters.³² Additionally, the doctrines include determination of mission accomplishment, and problem solving as part of the leadership and decision-making skills of its warfighters. Like physics, speed and leverage reduce the level of brute force required to accomplish action.

To describe it in business terminology, manoeuvre doctrine is a competitive strategy, and dynamic decision-making is the combat leader's competitive advantage.

4.2 Manoeuvre Warfare Principles

There are two primary means of creating opportunities in manoeuvre:

1) Chaos + Adaptability = Opportunity

Manoeuvre doctrine takes a probabilistic view of war in that it perceives war as chaotic and uncertain. It additionally perceives war as a dynamic enterprise that it involves continuous change and requires continuous adaptation.³³ In turn, the commander perceives the chaos of war as an environment ripe with opportunities, and understands that exploitation is dependent upon adapting to and with the environment. In order for the commander to exploit the situation, he must mobilize his resources in a way that best aligns them to the particularities of the environment. Opportunity generation is the product of adaptation.

2) Speed = Opportunity

The traditional understanding of manoeuvre is spatial, where space is traded for positional advantage. However, at its essence, it is about taking action in order to generate an advantage that can be exploited to achieve one's goals. The advantage can be on any dimension, including spatial, technological or psychological; however, the temporal dimension is a particularly important and advantageous, as the goal is to develop superior speed of action so as to achieve a decisive superiority of resources at an opportunistic time and place.

³¹ Marine Corps Doctrinal Publication 1 (MCDP 1). 1997. Pg. 38.

³² Field Manual 7-8. *Infantry Rifle Platoon and Squad*. 2001. Pg. 1-1.

³³ Marine Corps Doctrinal Publication 1-3 (MCDP 1-3). 1997. Pg. 16.

The signature tactic of manoeuvre warfare is to leverage the chaos of the situation to create an exploitabile opportunity that will generate decisive results and achieve one's objectives. Creating such an opportunity is based on rapid, opportunistic and flexible decision-making. So as to achieve a position of advantage, one must use speed of action so as to outpace and overwhelm the opposition by responding to changes and seizing chances more quickly than the opponent. Then, in order to exploit the opportunities that present themselves, one must focus efforts on a particular objective so as to overcome its friction and achieve success. The quicker that one can respond to the changing environment, the quicker the opportunities that arise can be seized.

Manoeuvre doctrine is responsive in two ways: quick response time and high degree of effectiveness/appropriateness of responding action. Speedy action is possible in part because of flexible planning, and also because of the decentralization of decision-making authority. In mission command decision-making authority is delegated to subordinate commanders so that they may use their initiative to seize fleeting opportunities. Thus the delegation of authority increases organizational responsiveness and dynamism³⁴.

In addition to improving the speed of action, decentralization equally improves the effectiveness of decision-making. Subordinate commanders are in the thick of the action and at the point of the decision, and are thus better positioned than their further removed commander to make effective decisions.³⁵ Keeping in mind that an effective decision enacted in the present is more responsive than a better decision enacted later.

In dynamic environments it is imperative that action is responsive to the characterizing environmental uncertainty, fludity and speed. Plan responsiveness is dependent upon the level of coordination, or 'coupling' as it is called, that it requires. The tighter that a plan is coupled, the greater the level of coordination is required to respond to change, and thus, the more inflexible it is.

Conversely, the more loosely coupled a plan is, the less the amount of coordination is required for its action, and the more adpative it is.

Simpler plans are easier to change and thus more rapid, fluid and adaptive. Plan simplicity can enhance the speed of execution, thereby facilitating the creation of opportunity. "Once we have it, there are a number of things we can do to increase speed. First, we can *keep everything simple*.

³⁵ Marine Corps Doctrinal Publication 1 (MCDP 1). 1997. Pg. 85.

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³⁴ Marine Corps Doctrinal Publication 6 (MCDP 6). 1996. Pg. 46.

Simplicity promotes speed; complexity slows things down. Simplicity should be central to our plans, our staffs (large staffs may be one of the war's greatest consumers of time), our command and control, and our own actions.³⁶

It is worth noting, using speed as the basis of opportunity creation, is a relative consideration. In order for speed to be useful at generating opportunities, the decision-action cycle must be quick realtive to the competition and the environment. Absolute speed holds not special value or significance. The analogy driving manoeuvre planning is that a good plan delivered on time is better than a better plan delivered too late.³⁷ In business language, speed provides a first-mover advantage.

4.2.1 Opportunity +Flexibility = Success

In order to exploit an opportunity, a commander must utilize a flexible and adaptive decision-action process. From this awareness, manoeuvre doctrine embraces the fact that war is a dynamic enterprise that involves continuous change and requires continuous adaptation. It understands that absolute control over events is impossible, and the best that can be hoped for is successful action in general terms and the imposition of a general framework.

Manoeuvre doctrine understands that the friction, uncertainty and fluidity inherent to war make it chaotic and disorderly. It further takes into account that the propensity to make mistakes, the manifestation of unforeseen chance, and the misconfiguration of resources is likely to increase the level of disorder with each competition, and that the chaos of war cannot be eliminated.

Given that the fundamental tennet of manoeuvre is to trade something for an advantage, it is inherently opportunistic. Additionally, the warfighting plan must be flexible and kept in generalities so that success remains possible despite potentially having to relinquish elements of the plan in exchange of advantageous opportunity.

By exploiting and opportunity, on equally creates additional opportunities. This perpetuating cycle of opportunity creation will ultimately generate decisive results, whereupon the command is able to enact his decision and and secure his ultimate goals.

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³⁶ Marine Corps Doctrinal Publication 1-3 (MCDP 1-3). 1997. Pg. 78.

³⁷ Marine Corps Doctrinal Publication 1 (MCDP 1). 1997. Pg. 93.

4.2.2 Human skill

In addition to requiring attributes of speed, opportunism and flexibility, manoeuvre further requires certain human skills and traits. Manoeuvre leaders must be able to cope - if not thrive - in dynamic, fast-paced, chaotic and uncertain environments. These leaders must be able to act independently and take the initiative to exploit fleeting opportunities based on their understanding of the larger situation and objectives –see section 5.

As part of the probabilistic view of warfare, there is a belief that war is unpredictable and thus tactics are not bound by fixed rules. Because there are no fixed rules, leaders must develop their study, train and develop mental cognition in order to improve their dynamic managerial proficiency. This understanding is not lost on the Western militaries, and they have dedicated significant resources to achieving this end.³⁸

Manoeuvre doctrine therefore favors decentralized command, and places great trust in subordinates to respond to unforeseen changes, exploit opportunities, and achieve higher-level objectives.

5. Combat Command and Control: An Approach to Dynamic Managerial Capability

5.1 Fundamentals and Principles

Both in and outside of the military, *command and control* (C2) is the exercise of authority to accomplish action. It serves to plan, direct and coordinate resources in task accomplishment, and its purpose is to improve the effectiveness of action. The US Department of Defense characterizes command and control in the following way: "It is the fundamental role of the commander. Command and control is the means by which a commander recognizes what needs to be done and sees to it that appropriate actions are taken." ³⁹

As the name suggests, there are two distinctive and interconnected components of command and control: command, and control. *Command* is the authority that provides power to act, and *control*

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³⁸ Marine Corps Doctrinal Publication 1-3 (MCDP 1-3). 1997. Pg. 16.

³⁹ Marine Corps Doctrinal Publication 6 (MCDP 6). 1996. Pg. 44.

is the responsibility to achieve results, and encompasses the tools to do so. The US Army describes command and control as follows:

"Command is the authoritative act of making decisions and ordering actions; control is the act of monitoring and influencing this action. While command and control may be discussed speratately for understanding, in practice, command and control is a unified entity. The commander cannot command effectively without control, and he, with or without the staff, cannot exercise control without command."

A highly deterministic organization perceives command and control as rigid and predictive, and attributes both functions to the commander. Because both functions are assigned to the commander, C2 is a unidirectional and centralized process whereby the leader imposes control on his subordinates.⁴¹

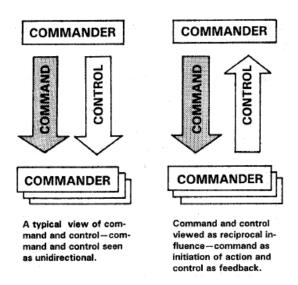
In contrast to this approach, and in line and in response to the probablistic view that war is dynamic, the manoeuverist approach sees command and control as being bi-directional and a dynamic process whereby command is the authority to initiate action, and control is the feedback of information indicating the difference between the goals and the situation as it exists. It is thus a decentralized cycle whereby feedback controls command action as part of an interactive process between the two elements. With this approach, a commander decides what is to be done and then influences the conduct of his subordinates accordingly by directing them as to the action is to be taken. As the action unfolds and the situation develops, the commander receives feedback indicating the differences between the goals and the situation, thus allowing the commander to adapt to the changing circumstances in order to exploit opportunities, respond to emerging problems, and redirect efforts as necessary.⁴² C2 is thus a mutually supporting system of interaction and continuous adaptation.

⁴⁰ Field Manual 101-5. 1997. Pg. 11.

⁴¹ Marine Corps Doctrinal Publication 1-3 (MCDP 1-3). 1997. Pg. 47.

⁴² Ibid.

Figure 1: Command and Control Relationships 43



There are four fundamental characteristics associated with the probablistic view of C2: 1) it must be sensitive to changes in the situation; 2) it is a continuous, cyclic process; 3) the feedback loop makes it a dynamic and interactive process of cooperation based on influence; and, 4) the commander is not above but rather is a part of the C2 system.⁴⁴

There are two concepts that capture the above characteristics which are used in maneouvre doctrine in order to thrive in dynamic situations: 1) the OODA loop/ Boyd's cycle; and 2) Mission Command. These two concepts provide the rapid, flexible and adaptive basis of the land force decision-making and action processes.

5.2 OODA Loop

The Observation- Orientation- Decision- Action loop (OODA loop), was devised by United States Air Force Colonel John Boyd, and describes the decision-action cycle. The military C2 process is based on this principle, which states that one first observes his situation by taking in information about his status, the environment, and his enemy. Thereafter, one orients himself to the situation by analyzing and interpreting the information in order to develop an understanding and visualzliation of the situation. The goal is to identify and understand the unique characteristics of the situation. Based on one's

⁴³ Marine Corps Doctrinal Publication 6 (MCDP 6). 1996. Pg. 48.

⁴⁴ Marine Corps Doctrinal Publication 6 (MCDP 6). 1996. Pg. 54.

orientation, he will decide what to do, whether that be to respond to the situation intuitively or develop an analytically-based, deliberate plan. Finally, one will act. This includes communicating the decision, supervising the execution, and developing feedback. Given that the action therein changes the situation, the cycle re-commences.⁴⁵

Figure 2: The OODA Loop⁴⁶



There are two goals associated with the OODA loop: rapid action and effective action. If the action taken is ineffective, then the effort and time spent was wasted. The speed of action allows for the exploitation of opportunity. The quicker the process is completed, the greater the potential for opportunities.

5.3 Mission Command: Decentralized and Delegated Authority

Manoeuvre doctrine utilizes a decentralized command and control philosophy known as *mission* command. Mission command is characteristically opportunistic, and promotes initiative and freedom of action by subordinate commanders. In order to ensure that the decisions taken by subordinate commander are harmonious with the larger objectives, a commander relies on two command tools: 1)

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⁴⁵ Marine Corps Doctrinal Publication 1-3 (MCDP 1-3). 1997. Pg. 76.

⁴⁶ Marine Corps Doctrinal Publication 6 (MCDP 6). 1996. Pg. 71.

command by influence/ commander's intent; and, 2) effects-based approach (EBA)/ mission tactics.⁴⁷ The value of mission command is that it provides the responsiveness necessary to addresses the inherent fluidity and uncertainty of dynamic environments.

The uncertainties of war diminush the value of detailed planning. Decentralized command and control, achieves responsive and effective decsion-making that detailed planning cannot. Decentralized C2 achieves its goal by delegating authority across the organizational hierarchy as much as possible so that the person who is best positioned to make a particular decision is authorized to do so.

The aim of mission command is not to increase C2 capacity but rather to reduce the need for it. By developing simple and flexible action plans there is a reduced need for commanders to directly control subordinate operations, thereby increasing operational responsiveness as well as freeing up the commander's time to focus on achieving higher level alignment.

The importance of decentralized command in the conduct of operations in a dynamic environment should not be underestimated, and it has been touted as one of the most significant features of modern warfare.⁴⁸

 $^{^{\}rm 47}$ Marine Corps Doctrinal Publication 1-3 (MCDP 1-3). 1997. Pg. 79.

⁴⁸ Marine Corps Doctrinal Publication 1-3 (MCDP 1-3). 1997. Pg. 79.

Figure 3: Concepts of Command and Control⁴⁹

Mission Command		Detailed Command
Probabilistic Unpredictable Disorder Uncertainty	Assumes war is	Deterministic Predictable Order Certainty
Decentralization Spontaneity Informality Loose rein Self-discipline Initiative Cooperation Acceptable decisions faster Ability all echelons Higher tempo	Tends to lead to	Centralization Coercion Formality Tight rein Imposed discipline Obedience Compliance Optimal decisions, but later Ability focused at the top
Implicit Vertical and horizontal Interactive	Communication types used	Explicit Vertical Linear
Organic Ad hoc	Organization types fostered	Hierarchic Bureaucratic
Delegating Transformational	Leadership styles encouraged	Directing Transactional
Art of war Conduct of operations	Appropriate to	Science of war Technical/procedural tasks

5.3.1 Commander's Intent/Command by Influence

Because detailed planning is of diminushing value, a commander should refrain from it and instead provide his subordinates with only the information necessary for initial action. He does so via a command tool known as the *commander's intent*. Commander's intent is the articulation by the commander of his concept of action. It provides subordinates a larger context for their actions by explaining four things: 1) the purpose of the operation; 2) the sought effect of the operation; 3) the main effort of the operation; and, 4) the desired end-state, which is to say, the threshold for completion. Most importantly, it enables subordinates to exercise judgement and initiative when the unforseen occur, ⁵⁰ as they are aware of the overall concept and can act as required within it. In dynamic environments, the situation will evolve but the overall goal is less likely to change. So long as subordinate commanders understand their commander's intentions, they are able to act independently and exercise initiative while still retaining organizational harmony.

If a subordinate commander understands his commander's intentions, he can exercise his own initiative and adapt to the changing circumstances without compromising the higher purpose, and

⁴⁹ Field Manual 6-0. 2003. Pg. 30.

⁵⁰ Marine Corps Doctrinal Publication 1-0 (MCDP 1-0). 2001. Pg 135.

without needing to delay action in order to seek his commander's approval. Therefore, the operational tempo can be maintianed despite situational changes and the organization is as responsive as possible.

The issuance of the commander's intent constitutes prepatory planning, and it keeps both the OODA loop tight and ensures both the unity of effort and the responsiveness of organizational operations.

By providing expressions of vision rather than rigid directives a commander is said to be influencing the actions of his subordinantes, and is exercising what is known as *command by influence*. Command by influence guides subordinates' actions in view of and through situational developments, by providing them with increased situational awareness that will in turn influence their decision orientation. It enables subordinates to act as autonomously as possible. This style of command is related to the second command tool, effects-based approach.

5.3.2 Mission Tactics and Effects-Based Approach

Given that the commander leads by influence rather than by directive, he must issue orders that offer the greatest amount of latitude possible for subordinates to exercise initiative and decision, and he does so by using what is known as the *effects-based approach (EBA)*.

EBA focuses on *ends* rather than *means* of execution, and thus creates a high degree of flexibility in the decision-making process. The Canadian Forces Land Operations manual describes EBA in the following way: "EBA is the way of thinking and specific processes, integrated in both the physical and psychological plane, that focus on outcomes (effects) rather than activities to enable both the integration and effectiveness of the military contribution within a comprehensive approach and the realisation of operational and strategic outcomes. The EBA process is the organization of activities to achieve planned, desired and measurable effects that will realize objectives and ultimately meet the misson end state."⁵²

EBA allows for *mission tactics,* which is "the assignment of a mission to a subordinate without specifying how the mission must be accomplished." ⁵³ It is an extension of *mission command*. The higher commander articulates the mission and its purpose while the subordinate commander

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⁵¹ Marine Corps Doctrinal Publication 6 (MCDP 6). 1996. Pg. 117.

⁵² B-GL-300-001/FP-001. 2008. Pg. 143.

⁵³ Marine Corps Doctrinal Publication 1-3 (MCDP 1-3). 1997. Pg. 79.

determines the tactic to be used. Like mission command, mission tactics allows for quick and effective action.

Additionally, mission tactics frees up the time of the senior commander so that he can concentrate on higher level considerations.

6. A Case for Hiring Veteran Combat Leaders

Veteran combat leaders have a competitive advantage in dynamic decision-making and managerial capabilities as a result of their difficult to imitate combination of training, experience, and culture. In as much as the core competence is warfighting it is equally in dynamic managerial capabilities. The very nature of war is dynamic, and managing it requires dynamic managerial capabilities. There are two key ways by which they possess such a strong competence in dynamic capabilities: 1) They have a deep understanding of dynamic capability theory as developed through manoeuvre warfare doctrine; and, 2) they have experience with dynamic managerial capabilities and decision-making at the organizational level as developed through command and control doctrine.

While their ability to manage violence has little transferability to the business world, their ability to manage resources in dynamic situations is particularly valuable, and it is the reason why firms should incorporate these veterans into their organizations. Hiring these veterans and incorporating their managerial capabilities at the firm level has the potential to create a more adaptive organizational culture, structure and processes that can enhance organizational agility and competitiveness.

7. Conclusion

As presented above, business strategy and military doctrine share a number of commonalities and complementarities. In sum, the goal of manoeuvre warfare is to generate exploitable opportunities in order to develop a competitive advantage. The nexus of manoeuvre doctrine and dynamic capability theory is that the development of exploitable opportunities is synonymous with the development of dynamic capabilities. The means by which manoeuvre doctrine prescribes this development is through superior decision-making. The command and control framework of manoeuvre doctrine articulates the

theory and practices of dynamic decision-making, and thus constitutes as source of dynamic managerial capability. Paramount to the C2 doctrine is decentralized command, which fosters organizational adaptiveness, responsiveness and speed, and together, these characteristics enhance organizational agility. Therefore, the application of manoeuvre doctrine, its recommended decentralized decision-making system, and the engagement of its practitioners all constitute opportunities to enhance a firm's competitive advantage. Given that manoeuvre command and control revolutionized warfare, we are left to wonder what potential it could unlock in the corporate environment.

7.1 Future Research

Given the conclusion drawn above, there is much to be explored about the role of military doctrine in a business environment. For example, little is known about how combat veteran leaders can integrate and leverage their skills in the private sector outside the realm of security and policing. In what roles and sectors do they excel? Do Navy and Air Force veterans share similar dynamic managerial traits? In what ways do military training, experience and culture develop managerial capabilities and cognition?

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