

A COMPARATIVE ANALYSIS REGARDING THE MANAGEMENT OF COMBAT AND LOGISTIC TACTICAL STRUCTURES

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Nowadays, significant problems and difficulties can be seen in the field of human resources. These induce major restrictions in the management of tactical logistic structures. The lack of personnel, the need of carrying out multiple jobs, the technological development, as well as the multiple changes of rules which are taken in the financial, human resources, and logistics domains make the decision process a very difficult one. Regarding all these areas, if you want to be capable to work in an organization you have to master the management theory, to be able to use different methods of motivating employees, and also to have considerable professional knowledge. We consider that as a logistics leader you should never stop learning and improving your skills. Getting the first rank and becoming a logistics officer are just the first steps in personal development.

Keywords: logistics; leader; management.

Introduction

The management theory draws remarkable conclusions from the research carried out so far. In this context, we wanted to know if the military domain influenced the beginning of the management theory, and also the measure in which the theory and art of leading troops had some positive influence on the science and art of management. We noticed that books like *The art of war* written by Sun Tzu, *The art of war* written by Niccolo Machiavelli, like *The art of war* written by Antoine Henri Jomini, *On war* written by Carl von Clausewitz, *Strategy: a history* written by Lawrence Freedman presented almost no connection with any management principles. The books speak about the planning and organizing troops giving different geometrical or mathematical models. All of these are presented in a conflictual context where the cunning behavior, surprise, deception and violence have a major role. The notions about the war found in the mentioned books refer to destructive aspects and therefore they hardly brought any contribution to the first elements of management science. Nevertheless, scientific

management is essential in the training of combat troops and in logistic structures' process of learning and acting. There are many similarities between the military logistic structures and companies producing goods and services.

The most basic facts of management theory were written by Adam Smith. He used observation as a research method and he discovered the need of specialized personnel in manufacture departments. Yet, the significant steps taken in the evolution of management theory were made by Taylor, Frank Gilbreth and Lillian Gilbreth. They were the ones who developed **scientific management**. Taylor was a foreman in Midvale Steel Company and he was in charge of a group of workers. He saw that the building workers had strict working rules and they did not use their entire capacities to do the jobs. He also noticed that if the workers were motivated the productivity increased. Furthermore, as a consultant for different companies, he studied and implemented many efficient methods for improving productivity and motivating personnel. In this manner, he found the ideas from which scientific management was developed. In the same period of time, Frank and Lillian Gilbreth studied the masons work, the way they built with stones. They seemed to have found an optimal positioning of bricks, mortar, and workers. Using that combination, they succeeded in increasing the productivity with 200%. Starting from this study, they streamlined the productivity in other domains.

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The next step in the development of management is represented by administrative management. It was discovered by Henri Fayol, a French industrialist who became famous by writing *General and Industrial Management*. He was the first one who wrote about the management functions and he is still considered a management theory representative. One of his successors was Lyndall Urwick, also an entrepreneur and consultant in the field of management. Max Webber was the German sociologist who wrote the bureaucratic theory. The main difference between the scientific management and the administrative management is that the former focuses on the way personnel work is organised and the later concentrates on the way the entire organisation is led.

The behavioral approach to management came with a new idea: the importance of the psychology in industry. Its promoter was Hugo Munsterberg. His research was initially published in *Psychology and Industrial Efficiency* and was used when employing and motivating personnel. Moreover, Mary Parker Follet was the one who discovered that the employees' behavior had a significant role in productivity. Between 1927 and 1932, he conducted significant research regarding the behavioral approach to management at Western Electric's Hawthorne Company. He wrote about the group's behavior and underlined the connections between members of a group and the group.

Abraham Maslow and Douglas McGregor were two of the best-known contributors who helped advance **the human relations movement**. They stated that the manager's safeguarding and care for his/her workers had positive effects such as the growing feeling of satisfaction, the improving of motivation, and the increase in productivity. Abraham Maslow was the one who wrote the pyramid of needs theory and Douglas McGregor developed X Theory and Y Theory, regarding two extreme perceptions of managers upon their employees and the results that behavior associated to these perceptions have in the work productivity.

Nowadays, scientific management theories admit that the organizations and their members have a complex behavior. Taking the psychological, social, anthropological and economical implication into consideration, many authors theorize about organizational behavior. Approaches about leading

the organization like a system of systems, the one about contingency, the quantitative management, and the operational management have no connection with the military area. Despite this, many principles from the military domain were transferred and successfully used in management. Notions like tactics, strategy, strategic position, strategic alliance, leadership, strategic planning, combat maneuvers and many other examples from military history are used in management. All of them make the explaining process much easier and help us understand different methods and technics from management. Moreover, the utility and the essential contribution of military tradition to the development of management art and theory are demonstrated. On the other hand, the vital role played by the application of management theory in military leadership was confirmed by Hervé Couteau-Bégarié, a French historian and political scientist who wrote that „*in strategy, like in any other human activity, execution must be planed beforehand. This is the assertion which proves that management is a primordial domain*”.¹

A comparison of missions conducted by different structures at the tactical level

Each great unit, combat unit or combat support unit simultaneously comprises logistic and combat elements. Even if its main purpose is to support the troops, logistics has to work in a hostile field. In many cases, this field represents the main enemy target and, in this case, logistics has to be able to fight. It has light infantry weapons, some reconnaissance equipment and some heavy guns. Broadly speaking, we want to know if a logistician manager should be a charismatic leader, an excellent conductor, a talented leader or a great logistician. We believe that a logistician should have features from each type of personalities mentioned before. All of them: the personality, the behavior, the attitude, they all make up the picture of an ideal leader, a person who does not accept failure, but at the same time a person who cannot be easily found.

We consider that the management must be adapted to the type of the military structure. Yet, the management for the logistic structures must be different from the management used for the combat troops. The one which is used for the combat support units should be different, too. To prove the fact that

we need different types of management, we chose to describe a few tactical units which have different branches. We are going to try to underline some features of their missions.

The mechanized brigade (infantry) has special fighting vehicles equipped with light weapons. It has joint companies and it is designated to fight in different operational areas in spite of the weather conditions. At peace time, this great unit trains in order to be capable to fight at tactical level, to be able to move as quickly as possible and fight as part of a division. The mechanized brigade has as the main mission to destroy, to capture and to annihilate the enemy. However, this military structure gets offensive and defensive missions and it is also involved in other security operations. It is a mobile structure and it generates task-force elements which have precise, isolated missions.

To accomplish its mission, the mechanized brigade must prove mobility and lethality and it has to be able to do many things. The commander should know how to synchronize all the forces, how to use the subordinates' abilities even if they are stressed and tired. We believe that a leader should be able to manage efficiently the entire organization. Furthermore, we consider that the leader skills, the capacity to motivate his subordinates and fulfill the operational tasks and battle duties, as well as the clear vision on the battle stages, regardless of the form, are essential to effectively lead the entire organization. Although the person in charge with logistic management within the brigade is coordinated, task-wise, by the higher echelon, he/she strictly receives orders from his/her commander. He/she augments his/her commander's abilities by making sure that his/her comrades/colleagues know the capabilities of their equipment and armament, as well as fulfilling all logistic tasks from all functional areas.

The mountain troops brigade has armored support combat vehicles equipped with light weapons and it has joint companies designated to fight in mountains, individually or in cooperation with other structures, even if the weather is fine or not. In peace time, the great unit trains in order to be capable to fight at tactical level, to be able to move as quickly as possible as part of an infantry division. It should be capable to defense mountain locations, crossing points and to gain openings or another significant asset. Yet, it should destroy,

capture and annihilate the enemy. The mountain brigade gets offensive and defensive missions and it is also involved in other security operations. We believe that the mountain brigade commander and also the mechanized brigade commander should be also leaders and managers.

The tank units represent the main striking force and have the capacity to hit the enemy on the weak points. Yet, they have heavy armored vehicles which provide protection for the crew, the weapons attached to the vehicles, and the propulsion systems which at the same time provide operational mobility and generate a significant maneuver capacity. Tanks are capable to move over the rugged terrain and in adverse conditions such as mud (and be positioned on the battlefield in advantageous locations). It is true that tanks maintenance is expensive and logistics should put a lot effort in work. Yet, the standard fighting procedures must imply safety conditions and the fight should be integrated and coordinated. Moreover, the synchronizing between vehicle teams and troops has to be done in a proper way. The efficiency in communication, the logistic support, the unit's moves, and the efficiency in fire depends on the leader's competence. They should be highly educated and well trained. Leaders should also know how to manage personnel problems and how to discipline them. The increase of the units' equipment level implies a very well-trained manager for life-cycle cost. The life-cycle cost field is integrated in the logistic domain.

The artillery regiment is a combat support unit and is designated to annihilate the main objectives established by the superiors, irrespective of whether the objectives are just near the troops or near the enemy. The artillery regiments have heavy, highly technologized weapons, which are carried by specialized vehicle. They have to manage a lot of ammunition which lies in the area and which is very dangerous. The artillery commander must know the entire conception of the superiors. He must synchronize the fire of the heavy weapons with the maneuvers of the combat troops and he also has to avoid enemy strikes. The artillery regiments support the tactical great units and they fight together with the aviation against the aerial enemy. They have heavy and sophisticated weapons which help them defend the designated airspace. The air defense artillery becomes greater in value at the same time with the development of the hitting power.

The artillery and air-defense artillery are key branches in joint military defense system. Moreover, the defence of the air space is directly connected with them.

The ISR Regiment (intelligence, surveillance, and reconnaissance) is an infantry division structure specialized in intelligence (ACINT, HUMINT, IMINT, MASINT, OSINT, RADINT, SIGINT and TECHINT). They use special methods and developed technology to collect, process, and disseminate data in support of military operations. Moreover, ISR Regiment conducts in depth operations in order to surprise the enemy and to destroy its main assets. They fight in different zones, they use methods like parachuting, airdropping and penetration, and they frequently change their positions. They sometimes fight without using the communication system and the situation is frequently unsecure. Therefore, to lead an ISR Regiment is an extreme challenge. We believe that the importance of the logistic management increases with the technological level.

Together with the advanced knowledge specific for the army branches presented above, as well as military art and tactics, the regiment's command group must pay thorough attention to logistics, which is responsible for projecting the self-sustainment and maintaining fighting capabilities, during peace time as well as war time.

The logistic base is the most complex tactical structure and it is designated to support the units and the great units with products and services. It subordinates specialized great units and units which provide services for themselves and for the division's troops: some maintenance units which subordinate a few military equipment departments, a transportation battalion, some military storage facilities, an accommodation center, a support company and a medical facility. We can see that the logistics base has a complex structure.

The command group of the combat service support units is confronted with a double challenge. It does not have to create warfighting scenarios, it does not have to create CONOPs (Concept of Operations), but it has to understand the environment and the way the combat units and logistic units conduct training activities and receive support. On the other hand, regardless of the supported units' type, the command of the logistic units must be experienced in each own functional

area, in order to identify the best way of providing the necessary logistic support.

We can notice that the combat troops and the combat support troops have a destructive mission. All of them should be very well trained and they should know how to work together. They should have great fire power and the principles of military art should be very well used. Logistics is totally different: the logistic structures' missions have similar features with goods and services procurement.

On the one hand, we can say that the logistic structures are like goods and services companies which have the combat troops as clients. The satisfaction level of the logistic support determines the accomplishment of the mission.

The combat troops have to train continuously, to play different scenarios and to use their equipment in order to know better how to use it. Moreover, they should collaborate and cooperate with the other troops and logistics should support all the necessary flows. Logistics should deeply know the fighting troops tactics. Nevertheless, logistics has its own tactics which is different from the others. The combat troops use concepts like enemy, adverse forces, while logistics has concepts like support, sustain, supply and ensure.

In order to complete the mission, the supported units and great units should stay connected to the goods and services' source. A high logistic support does not guarantee the success of the mission but the lack of logistics is a guarantee of failure. *"The competitiveness and the performance of an organization depend on an efficient and effective supply-send flow in which we find a synergy generated by the partner's common objectives and strategies."*²² All in all, the integrated planification and the continuous cooperation among the combat troops, the combat support units and logistics must be ensured.

On the other hand, every combat unit or combat support unit has logistics elements and every logistic unit includes fighting troops. Notwithstanding its productive character, logistics works in a hostile area and it is sometimes the enemy's main target. That is why it has light weapons, reconnaissance elements, and some pieces of heavy weapons and it is capable of fighting/able to fight.

On mature reflection, we have a doubt: which is the most relevant feature for a logistician? The

best logistician should be a charismatic leader, an excellent manager or a talented and admirable leader? In our opinion, a person who has all the mentioned features could be a perfect leader for logistics. A person like this never accepts failure but a perfect leader is almost impossible to find.

Manager and leader

Over time, the dialectics of the leader and his/her place in an organization generated many theories and controversies. The article is not intended to be exhaustive or to give radical solutions. Our intention is to write some lines about the manager-leader relationship and about the leader's place in conducting a logistics structure.

The commander is the military formal authority who should command a structure. He/she gets this position when he/she has the right qualification, some notable achievements and enough experience. The commander should have many abilities and he/she should know how to lead all the subordinated departments conjunctively, as an item. He/she has to accomplish the missions of the unit and to gain all the objectives of the structures. Moreover, *"the management is active, not theoretical. It is about changing behaviors and making things happen. It is also about motivating people, working with them, achieving objectives and gaining results. All the researches about managers show that they act on the spot, they are always involved in doing things and making them happen."*³

The commander should always work harder than his/her subordinates. He/she should be educated, well trained and he/she should exercise continuously his/her knowledge of military science and art. The commander should abide by the rules. Studies⁴ show that the manager uses his/her time in a divided manner. He/she cannot concentrate on one single activity for more than an hour. The reasons that the commander is obliged to switch the activities are: the large span of control and the multiple domains and branches (human resources, operations, instruction, exercises, logistics, communications, IT, classified documents, social media, operational medicine, finance, accommodation, etc.) he/she is in control of. Other studies⁵ stress the fact that planning is informal and there are only few times when planning is medium or strategic. This process is usually incomplete and too general.

Features like self-confidence, emotional maturity, power and independence improve a leader's personality. Education and specialization are essential, too. *"The leader is a charismatic person with natural features who has the ability to think ahead, to work together with the subordinates using his vision."*⁶ Moreover, a leader should have a high level of energy and a strong personality, to be resilient, honest, selfless, and loyal. Observing the results of the successful military academies, we realize that many features of a successful leader can be thought and a complete and complex educational system can help in forming leaders. Learning and training give steadiness and charisma to a leader. *"There is convincing evidence of the combination between genetic features and learned skills in a leader character. (Bouchard, Lykken, McGue, Segal & Tellegen, 1990; Zhang, Ilies, & Arvey, 2009). Probably, learning has a stronger influence on some character features (social needs) than genetics. Other features like temperament or psychological needs are defined by genetics"*⁷. Yukl divided the leaders' behaviours placing them in three classes: leaders concentrated on relations, leaders concentrated on tasks and leaders concentrated on change. The research underlined the fact that the leaders who gave more attention to the accomplishment of the tasks than to the improvement of the relations were more efficient. Moreover, *"the negative behavior impact (inadequate behavior, inappropriate action or failure) had, in general, greater effects than a positive one. Sometimes, the inadequate behaviors initiate a negative winding shape of actions and reactions between leaders and subordinates with negative consequences in accomplishing the projects."*⁸ About the leader behavior concentrated on change, on observing the environment modifications, on finding new perspectives, on encouraging the new ideas, we can say that it is a proper behavior for a good commander.

Powerful and honest leaders are meant to be great commanders. They need to have charisma and to be capable to prove themselves trustworthy, so that people would look up to them. All domains (goods and services, logistics support, recruiting people for military actions) should be led by real leaders. Moreover, direct conflicts must be properly guided. We believe that strong education, extensive experience, and a continuous study on military art

and science help the commander become a real leader. Besides, he will act in a strong manner and thus will be capable of making better decisions and of becoming a reliable person.

Opinions regarding the management systems of combat military structures and logistics structures

The complexity of managerial science and the military phenomenon have a common feature: both can be considered as pertaining to science and art. The manner in which the manager applies military science is influenced by his/her personal features, by the capacity of synthesis and abstraction. Moreover, his/her leading is determined by the capacity of innovating and finding solutions. Acting like a real leader needs a lot of work, learning, training and preparation. In peacetime, the commander should adapt training to the structure level: he/she should start with the soldiers' instruction and finish with the unit or great units' instruction.

The necessity of enforcing military discipline, for thoroughly executing orders during peace time, during training activities, as well as during war time, requires different approaches from the commanders of the combat troops as compared to the commanders of the logistic support units.

Besides the thorough knowledge of the military equipment, their technical characteristics and their inherent limitations, the commander of the combat troops and combat support troops must rely on suitable personal skills development, knowing their troops and having a strong cohesion within subunits. Likewise, seamless synchronization and the high stake requirements towards lower management regarding the control of their subordinates, own physical and military training, the concern towards their equipment, exigence in commanding the subunits, generate, with high probability, leadership styles that are rather authoritarian and the adoption of principles stated in the Douglas McGregor's *X Management Theory*, according to which motivation must be connected especially to physiological aspects and individual security. We make out a case for the current statement through the high level of danger generated by the military actions conducted by untrained personnel, by the possibility that soldiers could lose their lives or jeopardise the safety of their colleagues, having in mind the operating equipment. Likewise, using the

Expectations Theory by Lyman W. Porter, Edward E. Lawler and later on, Victor H. Vroom, differs for the fighting combat troops as compared to the ones involved in the production process. Different rewards, generated by the exhausting effort on the battlefield, ignite the willingness of continuing the effort at high performance levels for receiving new rewards. We agree that participative management, which has a multidimensional character, sequential (based on the repetiveness of the activities), integrative and institutional, can be applied with significant restrictions regarding the tactical level combat structures. The commander's will regarding military action must be kept secret and disseminated at the right moment to a certain category of personnel.

Fighting procedures have to be standardized and they cannot be modified according to the group or the platoon. The procedures were created by using the troops' experience in different conflicts. Also, the weapons had been adapted to accomplish the tactical demands. Not using the procedures can cause major problems between the structures.

We cannot say the same thing about the logistic structures. The specificity of the logistics activity forces top management to use a large variety of experts in different logistic functional domains.

The legal framework, the settlements about the products, the payloads, the supply roots, the purchase contracts, the technical solutions for maintenance and evacuation, the laws about prevention, the necessity of optimizing work obligate the logistic structure commander increase the subordinates' work, be active and ask the managers to train continually. *"Moreover, as a logistic management function, leadership has to take into consideration two aspects: the manner logistic managers work and the fact that they must provide a democratic leading and, at the same time, they have to motivate their subordinates to accomplish the established goals"*⁹.

We do not try to find a management general solution suitable for all military structures. We consider that the management guidance lines differ one from another: the tactical logistic structures must not have the same guidance as the fighting troops. While the logistic structure commander has to provide supplies, goods and services continuously, the combat troops' commander should lead military actions which imply fighting

the enemy, losses, captures and annihilations. If you want to be sure that the combat troops act in safety conditions you have to be firm and you should impose a framework, some established procedures, good training and some high standards of discipline. All of the above mentioned measures have to be applied to the logistic structures, as well. We have to admit that the logistic structures could sometimes be found in the same spot with the fighting troops. Moreover, the multidisciplinary logistic domain imposes hard study, adopting innovative solutions, regulated work, responsibility in working with expensive goods, an intense collaboration between structures in order to support them, etc. *"Logistics and logistic management have been continuously growing and evolving. Ever since it acquired a scientific dimension responsible for the efficient functioning of any social system, logistics has also acquired global dimensions, propagating like a religion, undoubtedly serving political institutions"*¹⁰. Likewise, the combat troops' commander or the support unit's commander leads the same type of specialized personnel, the logistic structure's commander leads different types of specialized personnel and he/she has to direct them in order to accomplish the established missions.

Speaking about the necessity of being a leader, we believe that a short and direct answer is not enough. As we mentioned before, not being a leader can be a cause of the lack of education or of the lack of experience. For a manager, being a leader means a lot of training, involvement and learning. In our opinion, the logistics activity has to be led by a well-informed leader who knows how to adapt quickly to his/her subordinates. Logistic support cannot be given in extremely hard conditions when the commanders are guided just by accomplishing the objectives without using the theoretical management. Even if management is considered a science or an art, it gives methods of growing as a real leader. It helps you to improve your leading skills, giving you the chance to become successful. Moreover, the subordinates have the chance to become experienced, well-regarded and appreciated.

Conclusions

Logistics means continuous activities and periodic processes. In peacetime, activities happen all the time, without interruptions. There is also a

constant flow between the making of the decision and the end of the operations of transition. Many complex missions are assigned to the logistic structure commanders. To obtain success in such a mission you should lead very well trained troops. Furthermore, the personnel must be educated and trained at high standards and they must also have tactical and logistic knowledge. Various types of dangers can affect the integrity of the organisation if education is not performed without any interruption. Moreover, for better results we should properly use the lessons learned. In Desert Shield and Desert Storm operations, more than a half of the casualties belonged to logistics; *"the most common cause of death were the accidents. The same thing happened in the supplying process in Iraq"*¹¹. All in all, many problems are caused by management mistakes. To avoid them we should learn how to lead the troops from the front.

NOTES:

1 Hervé Couteau-Béganie, *„Tratat de Strategie”*, vol.I, Editura UNAp „Carol I”, București, 2006, p. 352

2 Gheorghe Minculete, *„Abordări moderne ale managementului logistic”*, Editura Universității Naționale de Apărare „Carol I”, București, 2015, p. 35.

3 Stuart Crainer, *„Key Management Ideas: Thinkers That Changed the Management World”*, third edition, Financial Times Prentice Hall, 1998, p. XI.

4 Henry Mintzberg, *„The nature of managerial work”*, Harper&Row, New York, 1973.

5 John Paul Kotter, *„The general managers”*, Free Press, New York, 1982 apud Gary Yukl, *„Leadership in Organizations”*, eight edition, Pearson, 2013, p. 28.

6 Gheorghe Minculete, *„Abordări moderne ale managementului logistic”*, Editura Universității Naționale de Apărare „Carol I”, București, 2015, p. 35.

7 Gary Yukl, *„Leadership in Organizations”*, eight edition, Pearson, 2013, p. 136.

8 *Ibidem*, p. 54.

9 Gheorghe Minculete, *„Elemente de management al sprijinului logistic”*, Editura Universității Naționale de Apărare, București, 2005, p. 69.

10 Col.prof.univ.dr. Gheorghe Minculete, lector univ. dr. Diana Țuțuianu, *„Logistics management determinations related to economic constraints and operational requirements”*, Buletinul Universității Naționale de Apărare „Carol I”, București, martie, 2014.

11 Col.prof.univ.dr. Gheorghe Minculete, lector univ. dr. Diana Țuțuianu, *„Logistics management determinations related to economic constraints and operational requirements”*, Buletinul Universității Naționale de Apărare „Carol I”, București, martie 2014, p. 63.

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