

THE MILITARY ORGANIZATION – A CULTURE OF INNOVATION

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ABSTRACT

In general, the culture of an organization is a complex and dynamic entity shaped by a variety of factors, which plays a critical role in defining the way the organization operates and interacts with its stakeholders and can have a significant impact on its overall success and effectiveness. Innovative culture is essential to the success of organizations in today's ever-changing world. In recent decades, the military has had a significant impact on the development of technology and innovation in areas such as robots, drones, communications, information systems and artificial intelligence. The army has also used innovation to improve the training of soldiers and officers, develop new tactics and improve communication and collaboration between units. Moreover, the army is often recognized for its ability to adapt to difficult and unpredictable situations, such as wars or natural disasters. This requires innovation and creativity in finding solutions and adapting quickly to change. The paper presents the military organization as being concerned with creating and maintaining a culture of innovation, which requires a sustained commitment and effort from leaders and all those involved in the organization. It identifies within the organization the barriers to the cultivation of the innovative spirit and outlines measures for developing an innovative culture.

KEYWORDS: military organization, innovative culture, knowledge and innovation-driven organization, holacracy, Design Thinking, Lean Startup

1. Introduction

The culture of an organization is based on a variety of factors, such as mission, values, leadership style, organizational structure and employees' behavior and attitudes (Vlăsceanu, 2003). In the context of a military organization, culture is shaped by the unique requirements and needs of military operations as well as the history, traditions and values of the military institution. Some of the key factors that shape the culture of a military organization include:

Mission and purpose: military organizations are usually focused on a

specific mission or purpose, such as defending the nation, maintaining peace, or providing support to civilian authorities. This mission and purpose helps shape the values and priorities of the organization.

Training and discipline: military organizations place a strong emphasis on training and discipline, as these are essential to ensure that personnel can perform their duties effectively and safely. This focus on training and discipline can influence the culture of the organization because it encourages a focus on professionalism, respect, and adherence to rules and regulations.

Hierarchy and chain of command: military organizations usually have a clear hierarchy and chain of command, with individuals at different levels of authority.

Military culture places great emphasis on discipline, obedience and hierarchy, reflecting the need for clear lines of command and effective communication in high-stress and high-risk situations. It also values selflessness, duty and sacrifice, reflecting the willingness of military personnel to put their lives at risk for the safety and security of the country. Leadership is a key factor in shaping organizational culture, as leaders set the tone and establish the values and norms of the organization. Effective military leaders are able to inspire and motivate their troops, build trust and comradeship among team members, and make tough decisions under pressure.

But the effectiveness and capability of the military organization depends to a large extent on how it develops and this is achieved through evolution and innovation (Rosen, 2019). Therefore a culture of innovation is needed, to create the right circumstances for allowing progress.

2. Research Methodology

Based on the scientific literature, the paper aims to provide an empirical investigation of the military organization that is directed towards a culture of innovation and overcoming obstacles. The research is based on observation and analysis. The objectives of the paper are to understand the culture of innovation, to implement an integrated vision of training and development of the members of the organization that will enable them to surpass themselves in order to achieve their goals, to identify the barriers to the cultivation of the innovative spirit and to present the measures to develop the innovative culture. Useful methods for implementing innovation culture are presented, such as experimentation, Design

Thinking or Lean Startup. These are key components in the innovation process.

Through experimentation, people can test new ideas and concepts, expand their knowledge and identify innovative solutions to problems. Design Thinking is a structured process of creative thinking. It lies behind today's most successful innovations. Design Thinking focuses on approaching problems and innovation from the user's perspective, encouraging the team to think outside the norms and generate new and innovative ideas to solve problems.

3. The Military Organization – A Culture of Innovation

The military organization relies primarily on the military capabilities and skills of its members, with training and education being essential to their development. In addition, military organizations operate under a clear hierarchy of command and control to coordinate operations and ensure rapid decision-making processes in emergency situations.

Military organizations also rely on innovation to achieve their defense and national security objectives. Innovation is vital for the military as it must be able to respond to ever-changing threats and challenges (Rosen, 2019).

Throughout history, the military has been a place of innovation and development of advanced technologies, from weapons technology to communications technology and spy satellites. For example, the development of the intercontinental ballistic missile was one of the greatest successes of military innovation in the 20th century. Today, the military is involved in developing advanced technologies such as robots and drones to increase the efficiency and precision of military operations (Weiss, 2018).

The military is also a place where cultural innovation is important. This refers to changing thinking and organizational culture to encourage innovation. An example is the development of multi-

disciplinary working teams and innovation clusters capable of generating new ideas and developing solutions to complex military problems. Innovation is vital for the military, as it needs to keep up with technological developments and be able to perform its missions efficiently and accurately. The military therefore regularly invests in research and development to identify and implement the best technological and tactical solutions.

Instead, the military organization can be considered an organization based on knowledge, research and innovation to achieve its objectives, such as military academies.

Within a military organization, knowledge and innovation are important for the development of techniques, strategies and tactics needed to achieve its military objectives. Military organizations use research to identify new technologies and improve existing capabilities. Scientific research involves study, practice, human resources, financial resources and infrastructure to achieve outstanding results in innovation. In order to facilitate innovation, *a culture of innovation* must be established. A culture of innovation depends on the environment you create in your organization to “nurture” the innovative spirit that lies within each of its members. Innovation is a process that depends first and foremost on one's personal mindset. So, in order to establish a culture of innovation, mindsets need to be aligned (Polding, 2016).

4. Innovative Mindset – Challenge or Threat?

Innovative mindset is an innovation-oriented and creative approach to tackling problems and finding new and more effective solutions. It involves the ability to think outside the boundaries and bring in new ideas and perspectives to improve existing processes and products or to create entirely new products and services (Pisano, 2019a).

Innovative thinking can be developed by encouraging and supporting creativity and innovation in organizations and communities. It can be fostered by creating an environment where people feel free to share ideas, experiment and learn from mistakes without fear of failure or punishment (Morar, 2017).

The skills of a true innovator include association, the ability to ask questions, power of observation, experimentation and social networking. Some of these are more or less promoted in the military system. For example: the cadet is driven to make associations between information, to develop the ability to research, to observe possible danger or enemy, to become predictable with possible tactical scenarios. But at the same time, he is conditioned by certain rules and regulations in his expression and experimentation, as well as in his communication with his superiors.

An important element of the innovative mindset is the ability to adapt to change and to be flexible in thought and action. In an ever-changing world, it is essential that individuals are open to the new and willing to take risks to find better and more effective solutions.

In an organization, the management or leader has an important role in cultivating this innovative mindset, to facilitate innovation within the organization and for innovation to thrive, the first step is to effectively instill a new way of thinking and approaching problems (Useem, 2021). Members of the organization should see innovation as part of their job and their work should be pointed in this direction. This also requires establishing a common language. Innovation is based on many processes, techniques and tools, most of which are rather new and still uncommon in many organizations. Yes, indeed, the leader must not only share ideas, but also be able to analyze them constructively and offer collaboration. An effective leader is not only a good communicator, but also an

attentive listener and constructive collaborator (Useem, 2021). He must be open to new ideas and willing to listen to the opinions and feedback of those around them. An effective leader must be able to take responsibility for his decisions and actions, as well as encourage collaboration and the team to take responsibility for the success of the organization. In this sense, the leader must be a good mediator, stimulate dialogue and encourage team spirit.

5. Barriers to the Development of the Innovative Spirit

There are several barriers that can destroy the innovative spirit in an organization (Scaliza et al. 2022). These include:

1. Rigid and conservative culture: a culture that is based on tradition and conformity can inhibit the desire to try something new and innovative. This can be a strong barrier to innovation. If an organization has a rigid culture that focuses on maintaining the status quo and conformity, it can be hard for employees to express innovative ideas and take risks.

2. Controlling management: a management that focuses more on controlling and micromanaging employees can limit creativity and innovation. If employees feel supervised and do not have the freedom to express their ideas, this can discourage innovation.

3. Excessive bureaucracy: rigid procedures and rules can hinder innovation by being very difficult to change.

4. Limited resources: limited resources can be a barrier to innovation. If an organization does not have sufficient funding or human resources, this can limit the ability of employees to develop and implement innovative ideas.

5. Conformism: sometimes employees are afraid to come up with innovative ideas because they fear rejection or criticism from colleagues or managers. This conformity can be a powerful barrier to innovation.

Fear of failure – a culture that does not tolerate failure can inhibit the willingness to try new and risky things.

6. Resistance to change – people can often be resistant to change and may prefer to stay in their comfort zone, which can hinder innovation.

7. Excessive focus on profit – an excessive focus on profit can hinder innovation by making it difficult to justify investments or expenses in research and development.

8. Lack of a clear innovation process – if an organization does not have a clear innovation process, it may not be clear how innovative ideas can be proposed and implemented. This can be discouraging for employees and can limit innovation in the organization.

In general, to promote innovation, it is important that organizations create an environment where employees feel encouraged to express their ideas and take risks, where there is freedom to experiment and where innovation is recognized and rewarded (Scaliza et al. 2022).

6. Developing an Innovative Culture

The flourishing of innovation culture is achieved by reducing processes, formalities and procedures, thus restructuring the organization. Next, hierarchies and roles need to become more flexible. Giving members of the organization some flexibility in their roles, freedom of action, investing confidence in their ability to carry out tasks and make decisions, giving them responsibility and confidence in their capabilities (Scaliza et al. 2022), will lead members of the organization to achieve more and will nurture the innovative and proactive spirit.

An example of such an approach is *Holacracy*, an organizational management model developed by Brian Robertson in 2007 and initially implemented within his company, Ternary Software (Groth, 2014).

This model has subsequently been taken up and developed by other practitioners, including Rod Collins. Holacracy is a non-hierarchical approach to management that focuses on the distribution of authority and responsibility within the organization. Rather than relying on a pyramidal power structure, Holacracy uses autonomous work circles and distributed decision-making processes to encourage collaboration and innovation (Weirauch, Galliker & Elfering, 2023). This methodology is based on the idea that every person in the organization can have a significant impact on processes and decisions. By implementing Holacracy, organizations can become more agile and adaptable to change. Instead of waiting for decisions from top management, teams are empowered to make decisions at their own level, within their defined purpose. Holacracy also encourages clarity and transparency about responsibilities, as well as continuous development of employees' skills and competences. It is very clear that such Holacracy-type organizational management cannot be developed in the military system, where the pyramidal hierarchy and authority play a decisive command role, but it can borrow certain aspects. This is also the case in research hubs, where autonomous working circles are used to encourage collaboration and innovation.

Employees need to be encouraged to think about progress, project it in their minds and be encouraged to share their ideas. Reward systems work in this direction. For example, Google Company gives employees 20% of their working time to focus on their own ideas and problems that they wouldn't otherwise have time to tackle in depth. Or online platforms can be developed and implemented where members can share their ideas and have them discussed, analyzed, criticized and tested by everyone in the organization and beyond. This means that the whole organization takes part in the innovation process.

6.1. Experimentation

Experimentation should be encouraged because it is the basis for innovation. Experimentation means identifying opportunities, which often arise from problems, because innovative cultures have turned problems into opportunities (Pisano, 2019b). Even if they do not all result in innovation, they are opportunities for research and learning. Experimentation means, in fact, that ideas are not dismissed out of hand on the basis of assumptions. That is because you cannot be sure of the value of an idea until it is tested.

The innovation process often starts with an idea, a hypothesis or a problem to be solved. At this point, it is important to experiment to test these ideas and see if they are viable and work in practice. This often involves trial and error, successive adjustments and improvements. Experimentation can be done in a variety of ways, from laboratory tests to field tests and studies. Through experimentation, members of the organization can identify problems and develop innovative solutions to solve them. These solutions can be tested and validated through user feedback and analysis of results. Experimentation can also help improve and refine existing products and services.

The way failure is dealt with is part of how innovative organizations work. Experimentation comes with possible failure as part of the end result, part of innovation.

6.2. Design Thinking

Design Thinking is a method of approaching innovation and problem solving that focuses on the needs and experiences of members of the organization and on creating innovative solutions to those needs (Innovating society). It was originally developed by David Kelley and Tim Brown of the design firm IDEO and has become a popular approach in the business and design world. This approach is used primarily in product and service

design, but can be applied to a wide range of fields. Design Thinking is based on four main stages: understanding member needs, defining the problem, generating ideas and prototyping solutions. These stages can be iteratively repeated to arrive at the final solution (Innovating society).

The first stage, understanding members' needs, involves researching and understanding their needs and behaviors. This can be done through interviews, observations and data analysis.

The second stage, defining problem, involves synthesizing the information obtained in the first stage and defining the problem to be solved. This can be done by setting a clear and precise objective.

The third stage, generating ideas, involves generating solutions to the problem identified. This stage focuses on finding innovative and non-conventional solutions.

The fourth stage, solution prototyping, involves building models or prototypes of the solutions identified in the previous stage. This allows testing solutions in a realistic way and obtaining feedback from users.

Design Thinking can be applied in a variety of contexts, from developing products and services to improving organizational processes. This approach is based on collaboration and interdisciplinary approaches, which can lead to significant innovations and better solutions to complex problems. Design Thinking is a structured process of creative thinking that puts empathy for the members of the organization first and encourages the rapid testing of ideas until an innovation that meets the needs of the military system is achieved.

6.3. Lean Startup

Lean Startup is an approach to business development, created by Eric Ries, that focuses on creating and launching a product or service quickly to test and validate the business idea (Innovating society). Lean Startup principles include:

Hypothesis validation – before building a product or service, Lean Startup encourages entrepreneurs to test and validate their hypotheses about the market, customers, needs and solutions.

Rapid development – by building and launching a minimal product or service quickly, entrepreneurs can get timely feedback and adapt their product accordingly.

Continuous feedback – Lean Startup encourages entrepreneurs to get feedback from users and adapt their product based on that feedback.

Continuous innovation – by using the build – measure – learn cycle, Lean Startup encourages entrepreneurs to constantly think of new ways to improve their product or service.

By using these principles, Lean Startup can help military leaders reduce the risk and costs associated with developing a new research product. By testing and validating the idea before investing significant resources in building and launching the research, they can be more confident that their project will be well received and that they will achieve a significant benefit.

7. Measures to Develop Innovative Culture

Innovative cultures are desirable because they allow organizations to adapt quickly to change and continuously improve the products and services they offer. However, setting up and maintaining an innovative culture is not easy.

Creating an innovative culture often involves changing the mindset and behaviors of employees, as well as organizational structure and work processes. This requires a sustained effort from leaders and people within the organization to take risks and encourage new and different ideas (Polding, 2016).

It is also important to create an environment where innovation is

encouraged and rewarded. This can be done by creating innovation programmes or by providing incentives and recognition for good ideas (Scaliza et al., 2022). In addition, leaders should be willing to accept failure and encourage trying new ideas, even if they don't always succeed.

•Tolerance for failure requires intolerance for incompetence

Innovative organizations can be more demanding of their members' performance and competence (Pisano, 2019b). This is because innovation often requires critical thinking, creativity and strong technical and communication skills to turn ideas into reality.

However, it is important to understand that tolerance of incompetence can be a problem in any organization, not just innovative ones. Incompetent employees can have a negative impact on an organization's performance, and tolerating them can lead to loss of opportunities and low employees' morale (Pisano, 2019b). So while innovative organizations may be more demanding, this does not mean they are intolerant of inability to meet performance requirements. Instead, they may take a more proactive approach to recruiting and developing members who are able to contribute to innovation and superior performance (Scaliza et al., 2022).

•Willingness to experiment requires rigorous discipline

Willingness to experiment requires rigorous discipline to achieve meaningful and sustainable results. Experimentation involves trying new approaches, ideas and technologies in order to improve knowledge or services, to discover new opportunities and remain competitive in a changing world (Pisano, 2019b). However, successful experimentation requires a disciplined and structured approach. It is important to set clear objectives for the experiments

conducted so that the results can be evaluated and a direction for action provided. A well-defined methodology is also needed to carry out the experiments and to measure and analyze the results. In addition, openness to experimental learning and feedback is important, so that the approach can be adjusted and performance improved over time.

•Freedom and psychological safety require comfort

Psychological safety is an organizational climate in which individuals feel they can speak honestly and openly about issues, opinions or ideas without fear of reprisal or negative repercussions (Pisano, 2019b).

This type of climate is important in an organization because it allows people to freely express their thoughts and ideas and provide constructive feedback without being intimidated by repercussions. This can lead to more open and effective communication, thus improving collaboration and organizational performance. To create a climate of psychological safety, organizational leaders need to create an environment where all team members feel safe to express their ideas and share their thoughts (Scaliza et al., 2022). This may involve promoting positive, accepting and tolerant behavior towards different ideas and perspectives, providing positive and constructive feedback, and being open to feedback from management.

It is also important for leaders to take steps to prevent any form of restriction of freedom or discrimination and to ensure that all members are treated with respect and consideration.

•Collaboration must be balanced with individual responsibility

Collaboration within an organization is important to achieve common goals and improve overall performance. However, collaboration must be balanced with individual accountability to ensure that each

team member fulfils their responsibilities and contributes to the success of the organization. Individual accountability refers to each team member's ability to carry out their tasks and objectives in an efficient and effective manner, and to take responsibility for their results (Pisano, 2019b). It also involves taking responsible decisions and actions according to each individual's role in the organization. Collaboration, on the other hand, refers to the ability of the team to work together to achieve common goals by sharing ideas, skills and resources. It also involves collective decision-making and cooperation in problem-solving. To balance collaboration with individual accountability, it is important that each team member fulfils his responsibilities and takes responsibility for his own results (Polding, 2016). At the same time, all team members should be open to collaboration and share their ideas and resources to improve the organization's performance. Leaders of organizations should foster a culture where collaboration and individual accountability are considered equally important. This can be achieved by clarifying individual tasks and goals, promoting a collaborative decision-making approach, and providing feedback and recognition for individual and collective contributions. In conclusion, collaboration and individual accountability are two important aspects of a successful organization. To balance them, each team member must fulfill his responsibilities and take responsibility for his own results, while fostering a collaborative and cooperative approach to achieving common goals.

● ***Strong leadership***

In a knowledge and innovation-driven organization, management and the entire hierarchy must provide direction and coherence, ensure that everyone is working in the same direction and that decisions are made in a coherent way and in line with the organization's values and objectives (Pisano, 2019b).

Strong leadership should have the skills to communicate effectively with all members of the organization and ensure that everyone understands the vision and goals of the organization. It should be able to make quick decisions and take action when necessary (Useem 2021). It is also important that leaders have the skills to identify and manage conflict in a positive way and to foster a culture of trust and collaboration. By creating a positive and trusting work environment, leaders can ensure that members of the organization are motivated to work together and take responsibility for their own tasks.

8. Conclusions

In conclusion, an innovative mindset is essential for continuous development and progress, both at personal as well as organizational level. It is a way of thinking that can lead to innovative discoveries, inventions and improvements that can have a significant impact on people's lives and society. So employees should aspire to innovation in everything they do, and leaders need to ensure that they communicate this direction to members of the organization and they move towards it.

The army is one of the organizations that relies on innovation to achieve its mission. Advanced technologies, new methods of training and developing personnel, and the application of innovative strategies and tactics are just a few examples of innovation used within the military. Innovation is important for this type of organization because it must be prepared to deal with complex and varied situations. For example, developing new and more effective weapons, such as drones and smart weapons systems, is a priority for the army. The military organization relies on innovation to successfully accomplish its mission. Through innovation, the army can improve technology and strategies, protect troops and successfully perform various missions.

To develop an innovative culture, organizations need to be more concerned with selecting and developing members to encourage performance and innovation. However, tolerance of incompetence can be an issue in any organization, and a proactive approach to employee development is essential to achieve superior performance over time.

Willingness to experiment requires rigorous discipline and a structured approach to achieve meaningful and sustainable results. This includes setting clear goals, using a well-defined methodology, being open to feedback and learning, and adjusting the approach based on feedback and results. Experimentation is essential in the innovation process. It allows members to test new ideas, expand their knowledge and develop innovative solutions to solve problems. Through experimentation and feedback people can improve and refine existing research and services to make them more effective and useful. Psychological safety is an

organizational climate in which people feel safe to express their ideas and opinions, and can improve communication, collaboration and organizational performance. To create such an environment, leaders need to promote positive behavior, provide positive and constructive feedback, be open to feedback, and take steps to prevent any form of harassment or discrimination. Strong leadership is essential in a knowledge-based organization to ensure that the goals and values of the organization are put into practice and to foster a culture of trust and collaboration.

An innovative culture is both collaborative and focused on accountability, where members will be more motivated to work together to achieve common goals and fulfill their individual responsibilities. This will help to increase organizational performance and build a culture of trust, commitment and success. Thus, knowledge, research and innovation are important to the military organization, the innovative culture turns problems into opportunities.

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