

UNDERSTANDING ORGANIZATIONAL LEARNING IN MILITARY CONTEXTS: A CASE STUDY APPROACH

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Abstract

In an era defined by rapid global change and evolving security dynamics, military organizations must prioritize continuous learning to maintain strategic advantage and operational effectiveness. As emphasized by Revans (1983), internal learning must outpace external change to ensure organizational survival. This study explores the concept of the Learning Organization (LO) within a military context, examining the forces that support or hinder its development. Learning Organizations foster a culture of adaptability, innovation, and collective decision-making by empowering their members to contribute actively to organizational goals. However, many institutions continue to struggle with functional inflexibility, limiting their capacity to harness internal creativity and respond to unforeseen challenges or emerging opportunities. In contrast, other organizations have embraced forward-looking strategies and technological innovations that capitalize on human potential and institutional learning. Through a case study approach, this research identifies and analyzes the internal and external forces that support the evolution of a military unit into a learning organization. It also highlights the importance of cultivating an environment where knowledge sharing, strategic renewal, and participatory leadership drive sustainable development and long-term competitiveness. Ultimately, the findings suggest that organizational learning is not only a mechanism for resilience in the military but a strategic imperative for enduring success in a complex and uncertain world.

Keywords: Organizational Learning, Learning Organization, Military Innovation, Strategic Adaptation, Knowledge Management

1. INTRODUCTION

In order to adapt and thrive in a world of rapid change, a successful military organization needs to cultivate continuous learning so that it remains on top of changing circumstances and ahead of adversaries. Revans (1983, p.11) warns that

“Learning inside must be equal to or greater than change occurring outside the organization or the organization dies”. Learning organizations (LO) work towards enabling, empowering, and encouraging their members to take initiatives to achieve excellence and maintain their competitive edge through knowledge generation and strategic renewal. A number of organizations have been found to lack the functional flexibility necessary to access the pool of creative energy and inventiveness residing within their institutions as well as beyond, required both to address unforeseen obstacles, and tap into possible financial gain from future opportunities (Singh, 2011; Leavy, 2015). Some organizations, on the other hand, have acted quickly to invest in alternative, forward-looking strategies and cutting-edge technologies that aim to fully exploit the organization's human resources by maximizing their member's involvement in the collective decision-making process. This has been done in tandem with a

commitment to embrace continuous learning, which is viewed as essential to the growth and long-term sustainability of an organization. The term "Learning Organization" refers to a continuous, transforming process within an organization that equips it for forthcoming strategic challenges, and is essential for fostering innovation and ongoing improvement (Yeung et al., 2007; Jones et al., 2014; Senge, 2014; Wheelen et al., 2017). Organizational management models now acknowledge the crucial role of organizational learning in ensuring high levels of efficiency and long-term stability (Senge, 2014). For Stata (1989) the rate at which an organization learns may become the only sustainable source of competitive advantage.

The idea of the learning organization has garnered a lot of attention and a sizable following among those active in the entrepreneurial world in recent years. However, the concept hasn't always been well received by stakeholders who have highlighted concerns about perceived barriers to implementation, and its potential to deliver desired results (Garvin, 2003; Greiling & Halachmi, 2013; Pfeffer & Sutton, 2013). Some of these concerns might be attributed to the fact that the notion of the learning organization is often viewed in a purely abstract way, and discussion is often restricted to the highest levels of management. While the terms "organizational learning" and "learning organization" have been used interchangeably (Fulmer et al., 1998; Klimecki & Lassleben, 1998), they are also seen as interdependent (Thomsen & Hoest, 2001). A learning organization accumulates knowledge which is stored in organizational memory and incorporated into organizational operations. It does this by adopting a range of procedures governing information acquisition through knowledge exchange and interpretation (Anderson & Jefferson, 2018). It may be helpful to see a learning organization as the structure that enables and sustains the organizational learning taking place within its walls (Örtenblad, 2018). According to Yang et al., (2004), organizational learning refers to collective learning experiences that are used to gain knowledge and develop skills, whereas the term "learning organization" refers to an organization that exhibits or attempts to apply the characteristics of continuous, adaptive and generative learning. The quality of organizational learning occurring within a learning organization is dependent on a complex interconnection of factors that are the subject of this paper.

The idea of the learning organization originated with strategic planning, seen as the primary driver for strategic change. According to some studies, companies that embrace the idea of the learning organization look to offer opportunities for continuous learning and use it to accomplish predetermined objectives. Linking employee performance to that of the organization, encouraging research and discussion, emphasizing participation and creativity as sources of inspiration and innovation, and keeping an eye on, and interacting with the external world, are all ways to achieve objectives (Jashapara 1993; Calvert, 1994; Senge, 2014; Coughlan & Coughlan, 2018; Ansoff et al., 2018). The traits that set the learning organization apart from other more conventionally structured organizations are the subject of numerous studies. Some studies look at how learning is organized in relation to the many steps that lead to knowledge acquisition. These can be seen in the gathering, sharing, storing, documentation, interpretation, and eventually the application or utilization of knowledge. Other studies examine

learning organizations in terms of their leadership styles, organizational structures, human potential, information systems, and organizational cultures (Garrat, 2000; Sidani & Reese, 2018). However, few studies have based their research on the particular characteristics of learning within a military organization. This paper looks at the extent to which factors supportive of organizational learning are prevalent within a particular military organization.

Section 2 of this paper covers elements supportive of OL found in the literature review, Section 3 gives an account of the research methodology employed, Section 4 discusses the findings related to the presence of various factors supporting OL within the organization. Section 5 lists the organizational learning implications of the findings with recommendations and suggestions for future research and Section 6 concludes the paper.

2. LITERATURE REVIEW

Senge (1990) first introduced and developed the notion of a learning organization in his book entitled “The Fifth Discipline”. This conceptualizes organizations as dynamic systems, in states of continuous improvement “where people continually expand their capacity to create the results, they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (Senge; 1990, p.3). Senge maintained that traditional organizations need to make positive internal changes and transform themselves into learning organizations better equipped to meet and withstand the challenges and insecurities of a fast-moving modern world. Pedler et al., (1991, p.1) define the learning organization as “An organization that facilitates the learning of all its members and continuously transforms itself”. The potential for self-transformation through individual and collective learning is fundamental to the notion of the learning organization. West (1994) makes this point clearly when he states that there can be no organizational learning without individual learning, but individual learning must be shared and used by the organization. Individual learning is therefore a prerequisite for organizational learning (Simon, 1994; Riesen, 2004; Serrat, 2017). Learning organization scholars seem to suggest that wherever we find a learning organization we will necessarily find evidence of organizational learning. It is naturally not the organizations themselves that do the learning, but the people that make up these organizations who engage in learning (Örtenblad, 2018). The organizations are merely the repository for the learning and reflect its results. Ang and Joseph (1996) see organizational learning as a process and a learning organization as a structure. The structure of a learning organization affects the organizational learning that occurs within it and vice versa.

For Garvin (1993), the learning organization employs knowledge generation and transfer to modify organizational behavior to reflect new knowledge and insights and achieve a higher level of performance in order to facilitate the realization of organizational strategic goals. He offers this working definition of a learning organization: “... a learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights” (1993, p.80). Garvin views learning as instrumental in rebuilding, reorganizing, and regenerating the organization. In accordance with the learning organization principle, an organization in its entirety must support the learning process. An effective learning

organization must therefore include all of its members in meaningful discussion and inquiry, and foster an atmosphere that is open to the exchange of differing opinions (Fiol & Lyles, 1985; Davies & Nutley, 2018; Watkins & Kim, 2018).

Researchers have identified a number of forces thought to be supportive of ongoing learning within an institution. Among these are a commitment to ongoing learning, a shared vision and open-mindedness (Perin & Sampaio, 2003; Lafleur & Burtak, 2018), the role of leadership organizational structure and culture, learning processes that promote the capacity for innovation, the use of information technology to manage knowledge and streamline communications. These enabling factors are shown in Figure 1 below.

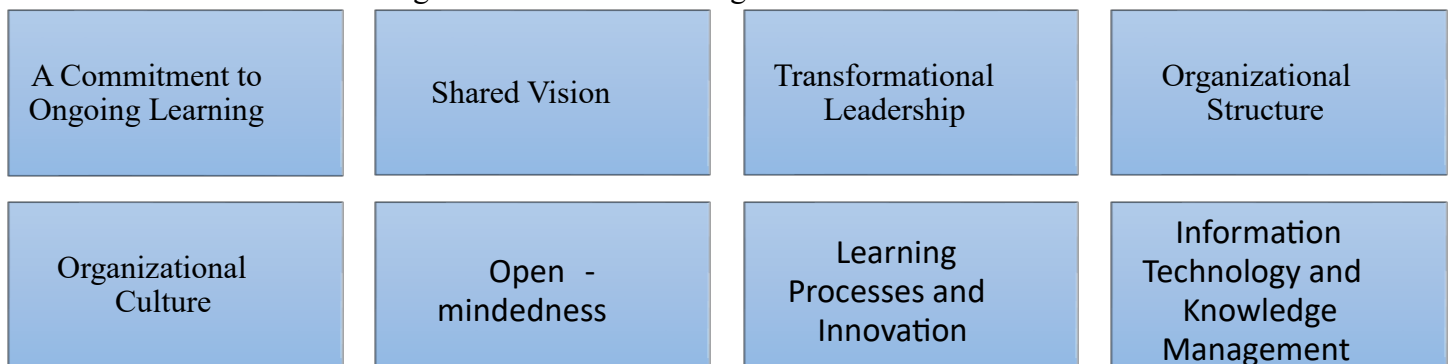


Figure 1: Forces that Support Organizational Learning 2.1 A Commitment to Ongoing Learning

Commitment has been described as "the strength of an individual's connection with and involvement in a particular organization" (Porter et al. ,1974, p. 604). Organizations need to recruit and retain personnel whose commitment to the organization extends to a willingness to participate in ongoing learning. Research has suggested an association between work satisfaction, individual and organizational performance and organizational learning (Reese, 2018). The persistent desire to learn which lies at the heart of a learning organization is nurtured by the leadership's steadfast resolve to make learning an essential component of the organization. To ensure that the organization not only thrives but also excels, a strong commitment to continuous learning from both the leadership and the membership is necessary (Armstrong, 2006; Lau et al., 2017; Lasrado, 2019). The level of commitment may be measured by the strength of desire of an organization's leaders to invest in strategic learning, develop human resources, promote the importance of learning and innovation and offer suitable learning incentives (Tseng, 2010; Bowen, 2018; Malik, 2018). The most crucial element of an organization's commitment to learning is likely to be its willingness to make learning a strategic objective. How well that strategy is aligned will affect how well that organization learns. Golembiewski (2018) argues that a strategic orientation towards learning frequently encounters significant resistance. Obstacles to change need to be anticipated and countered if institutions and communities are to successfully adapt and flourish in the modern world.

2.2 Shared Vision

A shared vision is one of the five defining disciplines that serve as essential building blocks for enhancing learning skills within a learning organization (Senge, 1990; 2014). A vision spreads through a reinforcing process that creates improved clarity, passion and commitment which permeates every corner of the organization. "As people talk, the vision grows clearer. As it gets clearer, enthusiasm for its benefits grow" (Senge, 1990, p.227).

Learning organizations are guided by a clear vision endorsed by their membership who are conversant with and supportive of the defined goals and policies designed to meet strategic challenges (Serrat, 2017). The realization of a vision is dependent on each member being aware of and committed to the organization's strategic objectives (Bennett & O'Brien, 1994; Mehta, 2019). A shared vision starts with the individual, and is developed by identifying common perceptions of the future that encourage sincere commitment and enrollment rather than compliance, serving as a foundation on which members can construct a shared feeling of duty and dedication. A shared vision is rooted in a desire to be part of something bigger and more inclusive (Kouzes & Posner, 2009; Ahsan, 2018).

Senge (1990; 2014) argues that a learning organization cannot survive without a vision which should be created early on since it gives the organization an unwavering focus and a thirst for knowledge (Fillion et al., 2015). The requirement for a shared vision to be a joint undertaking, involving personnel across the length and breadth of the organization, rather than one imposed on the membership by management is emphasized by Costa and Kallick (2015). Allowing an individual's personal vision to contribute to a shared vision of the future promotes commitment, and emphasizes commonality throughout the organization (Hodgkinson, 2002; Cohen, 2015).

Dixon (2017) asserts that when there is a common vision fully supported by employees, productivity and motivation levels are increased and organizational learning benefits. A common vision is believed to empower employees within the company, as well as play a significant role in leading internal development and assisting in the achievement of desired goals (Sinkula et al., 1997; Goh, 1998; Ndalama et al., 2018). It is crucial that an organization's leaders and stakeholders are fully behind the development of a community of learners and the creation of a shared vision. Organizational learning is enhanced by a participatory approach to policymaking that reflects the values of organizational members and stakeholders that share the vision (Sinkula et al., 1997; Mehta, 2019). A shared vision demands that all members are given a voice. Learning organizations may be seen as democratizing the decision-making processes and spawning a community of leaders. The process of leadership is essentially a skill that the organization aims to instill in all of its members. This effectively represents a radical shift from a more traditional and autocratic form of leadership towards a form of 'transformational leadership' (Burns, 1978; Northouse, 2018).

2.3 Transformational Leadership

Organizations that aspire to be serious players in today's world require a style of leadership that is transformational, forwardlooking and acquainted with the requirements and challenges of the future. A

prerequisite of learning organizations is that their leaders prove themselves capable of generating effective and productive organizational learning, are proficient at systems thinking, engage in critical and innovative thinking, recognize the importance of reflection, and make sound decisions individually and collectively (Weick & Westley, 1999; Zafar et al., 2018). It is the responsibility of leaders to promote a culture of open-mindedness and experimentation in the workplace encouraging and rewarding learning (Marquardt, 2011; Basten et al., 2018). Importantly, leaders need to think in terms of systems. Systems can be utilized as a practical tool to obtain a holistic and integrated perspective of the mechanisms of the organization, and as a spur to creativity and the development of smart solutions (Marquardt, 2000, 2011).

Burns coined the term “transformational leadership” to define the relationship that bonds leaders with their followers. According to Burns, transformational leadership seeks to “raise the level of human conduct and ethical aspiration of both the leader and the led and thus it has a transforming effect on both” (Burns, 1978, p.20). As the name implies, transformational leadership is a process that transforms and changes individuals and organizations through gradual adjustments and improvements. This sort of leadership is concerned with values, norms, standards, ethics, emotions and long terms goals. It is seen as something of an inspirational force that exerts a unique influence on followers, inspiring them to go the extra mile and to utilize all of their intellectual and creative reserves to out-perform expectations (Cleveland et al., 2000; Blanchard, 2018). A transformational leader is someone who can bring dramatic and positive changes to an organization or the group that he works with (Du Brin, 2012; Northouse, 2018). Transformational leadership usually originates at the top, with managers invested with the authority to set policy, distribute resources and determine the strategic direction for the organization. There is a consensus among commentators that transformational leadership begins with the development of a vision that is articulated with passion and underpinned by strong values. Such leadership also places public good before personal gain and narrow self-interest (Johnson, 2002; Baby & Varghese 2016; Johnson, 2002; Berkovich, & Eyal, 2021). Transformational leaders need to have the power of persuasion and a leader’s words should match his actions. The building of trust and confidence is vital in bonding and connecting leaders with followers. Transformation is based upon the creation and development of a flexible organizational structure, capable of adaptation, harmonizing changes and supportive of the cognitive development of individuals. It encourages systemic thinking and helps employees see situations and systems as a whole, and learn from the relationships that connect them (Campbell & Cairns, 1994; Jaiswal & Dhar, 2016). Problems are dealt with by employing a holistic approach rather than a fragmented one. The existence of a shared database that facilitates employee interaction and joint-decision making as a mark of transparency is another element of this type of leadership style. Transformational leaders adopt a people-oriented approach where employees feel that their needs are considered, and more importantly that they are valued. It is a form of leadership that inculcates people with a sense of personal worth (Northouse, 2001; Hawkins, 2017). Such leaders appreciate the individual contributions of all of the staff and work to raise the level of staff morale by providing them with the incentive and training to excel in what they

do. Leaders with a personal orientation are prepared to make concessions and sacrifices for staff in order to build a solid foundation of trust and mutual support. Transformational leadership is essentially the ability to persuade others to want to change and improve so that working within the organization becomes an uplifting experience. To be successful, a transformational leader must be visible, someone who is seen on the shop floor motivating and rallying followers, listening and showing concern. Co-workers must believe that the effort they put in will pay off, and that it is worth signing up and persevering (Faupel & Süß, 2018).

2.4 Organizational Culture

The term organizational culture is frequently associated in the literature with the values, convictions, customs, habits and attitudes that determine behavior within an organization (Saadat & Saadat, 2016; Dixon, 2017; Abdi et al., 2018; Polychroniou & Trivellas, 2018). An organization's collective set of shared values, beliefs, attitudes, behaviors, and presumptions is referred to as the organization's culture. The glue that binds the entire organization together is thought to be organizational culture, which can be understood as including fundamental, but frequently unquestioned presumptions about how things are done in the organization (Knapp, 2015; Gephart & Marsick, 2016; Warrick, 2017). As a result, each organization has a unique culture that sets it apart from other organizations (Schein, 1985; Groysberg et al., 2018).

The relationship between organizational culture and learning is addressed by several researchers. Schein (1992) viewed organizational culture as the by-product of a group of people working collectively to cope with external challenges and internal integration and is made up of a mix of assumptions, adaptations and learning. Organizational culture is viewed by Chang and Lin (2015) as a crucial process tying human and organizational learning together. Laubengaier et al. (2019), see organizational culture as a key factor in achieving the necessary organizational learning that results in change and development. Lee and Chen (2019) consider organizational culture to be simpler to describe than to experience, and believe that it has a significant impact on the abilities, routines, and innate practices that determine how learning develops in the workplace.

For sustained organizational learning to take place, the physical environment also needs to be considered alongside a supportive organizational culture (Marsick & Watkins, 2003). The physical environment provides the spaces and wherewithal to allow the enabling culture to bear fruit, to foster innovation and creativity inside the organization and assist the learning process by, for instance, promoting extensive technology use to speed up knowledge acquisition, and its incorporation into the organizational culture (Bapuji & Crossan, 2004; Hayes, 2018; Alabduljader, 2019; Roberto, 2019).

Organizational culture includes elements like peer support, trust, transparency, a dedication to learning, communication, and a common goal. In this regard, organizational culture has an effect on the decision-making process, and has the potential to affect how an organization runs. Any organization's success or failure may depend on the traits of its organizational culture (Lopez et al., 2004; Driskill, 2018; Naqshbandi & Tabche, 2018). An important offshoot of organizational culture is the quality of open-mindedness.

Odor (2018) states that a supportive learning culture promotes and encourages creative thinking and innovation. Additionally, it provides openness and the intellectual freedom to enable employees at all levels of the organization to challenge traditional ways of thinking, old mental models, and the time-honored way of doing business. Moreover, it empowers members of the organization to experiment, consider new ideas, and learn from past experience and the experience of others in order to stimulate creative thinking and innovation. Building a supportive culture for sustainable organizational learning that reinforces learning, generates new ideas and promotes risk taking, is considered a solid pillar of an effective learning organization (Kontoghiorghes et al., 2005; Senge, 2014; Senaratne et al., 2019). Because there appears to be a strong correlation between innovation and learning organization culture, it is important that the leadership of the organization understands how best to inculcate a sustainable learning culture within the fabric of the organization (Hussein et al., 2014; Luo & He, 2019). Crawford and Strohkirch (2002) acknowledge the value of the supportive culture provided by a learning organization and see it as encouraging continuous improvement and development for both employee and organization in terms of psychological, social, commercial and technological potential.

2.5 Open-mindedness

People in an organization have a propensity to perform predictably as time goes on, and to become entrenched in specific mindsets. The idea of unlearning is connected with open-mindedness (Alteren & Tudoran, 2018). Unlearning is being willing to alter outmoded routines, to challenge and possibly discard ingrained procedures as a result of in-depth reflection that challenges these practices and their underlying presumptions. The health of a learning-oriented organization, which is constantly looking for ways to improve its skills, depends on its ability to unlearn (Cegarra-Navarro & Wensley, 2019; Wang et al., 2019). Hence, having the ability to think critically and creatively can help an organization achieve its goals, and lessen the chance that its core competencies will become competency traps or core rigidities (Bryson, 2018; Kusumoto, 2018). It has been noted by Sivadas and Dwyer (2000) and Wang et al., (2019) that employees and leadership can arrive at new attitudes, mental models, cognitive maps, and ways of thinking through the process of unlearning and relearning. A disposition to let go of outdated frameworks, mental models, and paradigms in favor of more constructive ones is cultivated by being open-minded.

Being able to think outside the box is another way to define open-mindedness. An organization can move forward with optimism and confidence by relegating outdated practices to organizational memory (Saleh & Abel, 2018; Wang et al., 2019). It is a by-product of double-loop learning, also known as generative learning (Senge, 1990; Paine, 2019), which aims to change fundamental norms, policies, and goals. Challenging conventional wisdom isn't always welcomed by everyone, and doing so frequently necessitates sacrifices and concessions from those who are willing to do so. Abdi et al. (2018) point out that an organization that understands the need to transform itself into one that learns and embraces change should support open-mindedness and transparency at all operational levels.

2.6 Learning Processes and the Ability to Innovate

Many contemporary organizations fail to understand the nature and diversity of adult learning because they pay insufficient attention to learning organization theory (Cekada, 2012; Dunst & Trivette, 2012; Wilson, 2012). Learning policy grounded in learning organization theory is more likely to produce organizational learning that is effective, enduring and transformational.

The literature on organizational learning describes four basic types of learning. Action learning involves people learning by tackling real issues and reflecting on results, generative learning blends existing knowledge with experimentation and new ideas, anticipatory learning uses is a style of learning scenarios to make decisions about the future, and adaptive learning occurs when reflecting on past experience. According to Marquardt (2011), adaptive learning moves from procedures to results to evaluation and to feedback. Adaptive learning can be the driving force of change and development, and aligns and guides organizational behavior towards achieving desired outcomes (García-Morales et al., 2012; Chiva & Habib, 2015). The literature identifies three distinct processes of adaptive learning all of which are concerned with using past experience to guide an organization towards implementing positive change. Whereas single-loop learning looks at the link between problems and solutions and is intent on making minor adjustments to specific practices and behaviors, double-loop learning involves a deeper level of process analysis and seeks insights into why a particular solution works. This can lead to a deeper understanding of assumptions and a fundamental overhaul of organizational functions and structures and changes to the way an organization makes decisions. Triple-loop learning involves working towards a deeper understanding of the relationship between the organization and its environment, and places the emphasis on how an organization decides to respond to the context in which it finds itself.

Learning organizations are perhaps more closely associated with generative learning which feeds off our desire to experiment and discover new knowledge. In such an environment, employees respond to leaders who can take advantage of the 'creative tension' emanating from pressures associated with the present reality of running the organization, and those linked to its future direction (Senge, 2014; Obholzer & Miller, 2018; Uhl-Bien & Arena, 2018). Generative learning, relies on an atmosphere of open-mindedness and experimentation. It encourages creativity and innovation at the individual and group level (Namada, 2018). For generative learning to harvest results, members of an organization must be signed up to a joint vision, and fully supportive of organizational goals.

A focus on performance through creative thinking is a crucial component of the learning organization. Performance improvement and innovation are highlighted as key characteristics of a learning organization by Gephart and Marsick (1996) and Peris-Ortiz et al., (2018), in which learning processes and activities are assessed, followed up, evaluated, advanced, managed, and are in line with improvement and innovation ambitions as well as strategic goals. According to Garvin (1993), a learning organization is one that promotes creativity and innovation, is knowledge-generating and adept at adapting its behavior to reflect lessons learnt.

2.7 Organizational Structure

Transformation is predicated upon the construction and development of a flexible organizational structure, capable of adaptation, harmonizing changes and supportive of the cognitive development of individuals. According to Ngozi et al., (2017) learning organizations are characterized by having a flexible organizational structure which facilitates open communication and knowledge sharing and transferal. This is in contrast to a hierarchical structure which impedes the flow of information and knowledge through different departments and branches. The necessity to respond to change has meant that many organizations, particularly those that are privately-run, have switched to relatively flatter organizational structures that are equipped with self-managed teams (Annosi et al., 2018). A flatter structure that promotes the flow of information and allows for wider participation enables organizations to implement policies and strategies with greater ease and speed in response to changes in the external environment. Nonaka and Toyama (2015) found that strong organizational structures are those that promote and support learning through the formation of a knowledge spiral that swings between tacit knowledge and explicit knowledge through individual, group, and organization, and also among organizations. An organizational structure that enables organizational learning is one that seeks to empower its employees and include them whenever possible in decision-making processes. A structure that promotes transparency, the free flow of ideas and the contribution of all personnel is likely to create a workforce that identifies with the organization and is highly motivated. A decentralized system that allows for greater autonomy, increased collaboration through sharing information with the assistance of modern technology (Senge, 2014) will help to build a culture that supports learning, creative thinking and innovation. Conversely, attempts to keep employees in the dark and limit their ability to contribute leads to a compartmentalization of expertise that can dampen employee motivation and lower levels of creativity and innovation (Edmondson & Moingeon, 1988; Lam, 2004; Carroll & Khessina, 2019; H. Hasselblad & Ydén, 2019). A flexible organizational structure that enables the sharing of information and knowledge and expands the circles of consultation is likely to energize and reinvigorate organizational culture.

2.8 Information Technology and Communication

With the advent of the digital revolution, organizations can now set themselves up in a manner that supports the capturing and sharing of information across the organization. The development of information technology and communications has also made learning easier by improving accessibility and making it a richer experience. A variety of cutting-edge instruments are used to manage today's information, reinforcing learning and producing fresh insights (Sudharatna & Li, 2004; Serrat, 2017). According to Marquardt (2011), a high-quality information system that ensures the prompt transfer of information and knowledge is crucial for organizational learning. Employee performance and organizational performance are linked by such enhanced internal communication networks (Marquardt, 2002; Van Buren & Erskine, 2002; Marquardt, 2011; Senge, 2014; Reese, 2018).

A qualitative shift in the internationalization of the globe has led to an increased need for learning that is dependent on knowledge-intensive and cutting-edge technologies. According to Chaudhary (2018), enterprises are utilizing this technology to work quickly on the development of effective skills, competencies, and strategies to satisfy the constantly changing needs of customers in both local and global markets. A learning organization's path to continuing learning is now heavily technology dependent.

An effective knowledge management system is an integral part of the culture of a learning organization that places a high premium on the accessibility of knowledge at all levels of the organization. This stands in sharp contrast to traditional organizations where information and knowledge are often exploited for the purpose of control. In a learning organization, information and knowledge flow is accessible to all employees in order to encourage them to embark on a journey of uninterrupted collective learning, thinking and improvement. Supportive leadership gives employees access to the information and knowledge because this will help them better understand organizational goals and challenges. Moreover, this uninhibited approach to the free flow of ideas guarantees that everyone is on the same wavelength and understands the part they can play in contributing to achieving the shared vision (Xie, 2019). An important role of transformational leadership within a learning organization is to establish systems that ensure the smooth flow of knowledge and information generated from experience throughout the organization (Ratna et al., 2014; Vashdi et al., 2019).

3. METHOD

The research process is designed based on the research questions (Neuman, 2007; Korstjens & Moser, 2017). A case study often examines a single unit of analysis, such as a business or other type of organization, but it may also aggregate several such units (Ryan et al., 2007; Creswell & Creswell, 2017). This study confined itself to a single unit of analysis in the form of the military organization under study. The research design comprised four key components and their associated techniques, as shown in Figure 2.

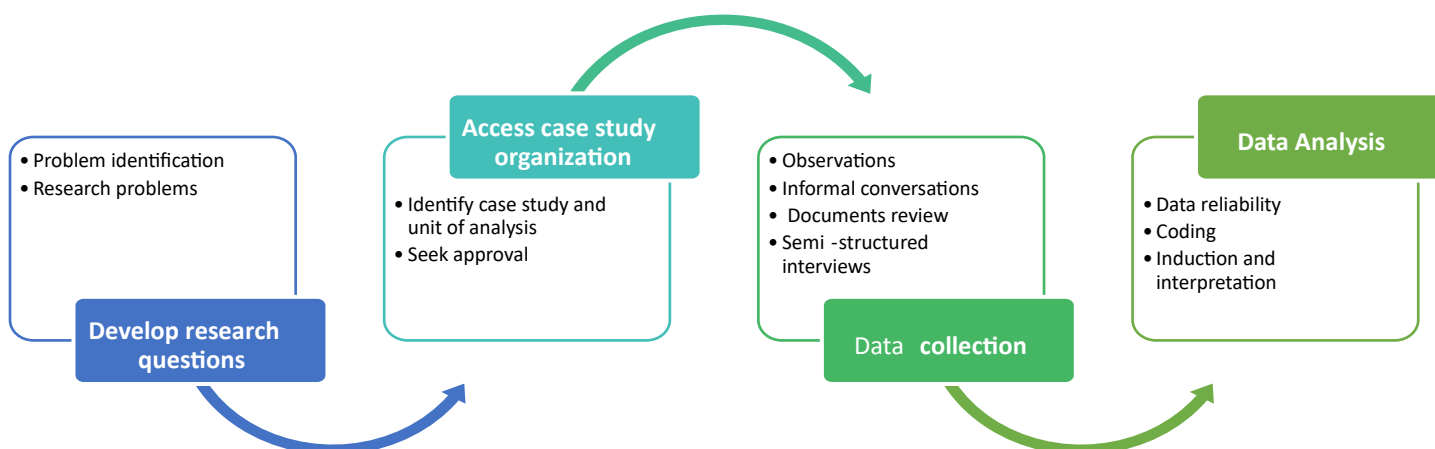


Figure 2: The Research Design 3.1 Research Questions

The research questions guided the case study and were open to amendment and improvement in light of the information gathered as the study advanced. The research questions were created to elicit responses that would shed light on the processes used by the military organization to facilitate effective organizational learning, as well as the degree to which newly acquired knowledge is utilized and integrated at the organizational level and retained in organizational memory. The study attempted to answer the research questions in a clear manner by following well-established case study methodology. **3.2 Access to the Case Organization**

Access to the military organization was obtained by the researcher who was familiar with the various sensitivities and security constraints associated with a military organization. Unfettered access to all library resources, facilities, bases and officers' clubs was granted. There were, however, certain restrictions with regard to operational details and classified information. The researcher informed the military authorities that data would be sourced from observations and informal conversations with the organization's service members, a review of documents and by way of semi-structured interviews with a cross-section of the organization's leaders. Assurances were obtained concerning the willingness of participants to cooperate and facilitate the data collection process.

3.3 Data Collection

While a large amount of data relevant to the title of this research paper was generated from semi-structured interviews with senior members of the case organization both active and retired, much of what was said was reinforced by data collected elsewhere from the review of documents and observations (Yin, 1994, 2014). Triangulation of the three sources of data was used to ensure greater reliability and a deeper understanding of the phenomena under investigation (Creswell, 2013; Yin, 2014; Yazan, 2015).

Participants were all senior officers in the case organization because it is the leadership that is primarily responsible for building and transforming organizations. Considerable effort was made to explore and gain a deep understanding of participant attitudes and behaviors regarding the process of individual, group, and organizational learning, as well as the integration and institutionalization of acquired knowledge. Semi-structured interviews allowed for greater flexibility in exploring new ideas, opening up new lines of inquiry, and following up on interviewees' responses. Interviews were conducted in private, and a follow-up interview was scheduled with participants when it was necessary to obtain additional data or confirm particular aspects. Informed consent, freely given, was obtained from all participants. The name of the organization and the name and position of participants must remain strictly confidential for reasons of military security.

3.4 Data Analysis

This study employed thematic analysis and used a multi-layered process collecting the information from the field, sorting it into categories or themes, and creating a picture or story as an aid to writing the qualitative text (Creswell, 1994). Data was sorted into themes through an inductive process of data processing (Merriam & Tisdell, 2016). Creating a preliminary list of themes and categories before beginning the processes of data gathering and analysis is also recommended by Marshall and Rossman (2014) and Harding (2018). By following this procedure, it is possible to keep data gathering on track and pertinent to the topic of study. According to Creswell (2013), unexpected and eye-opening new themes might occasionally emerge during data analysis. A key element in boosting the study's credibility and dependability may lie in the readiness to consider fresh themes in

response to data. Single words and phrases were coded after data was gathered and categorized to keep track of the initial interpretation. Coding is described by (Saldaña, 2009) as a means of assigning a word or brief phrase that captures the essence or evocation of a feature. In order to build a picture that helps to describe the situation, the study assigned data points to themes, and gradually connected the dots in the puzzle. Figure 3 illustrates the linear process of data analysis proceeding from coding to interpretation.

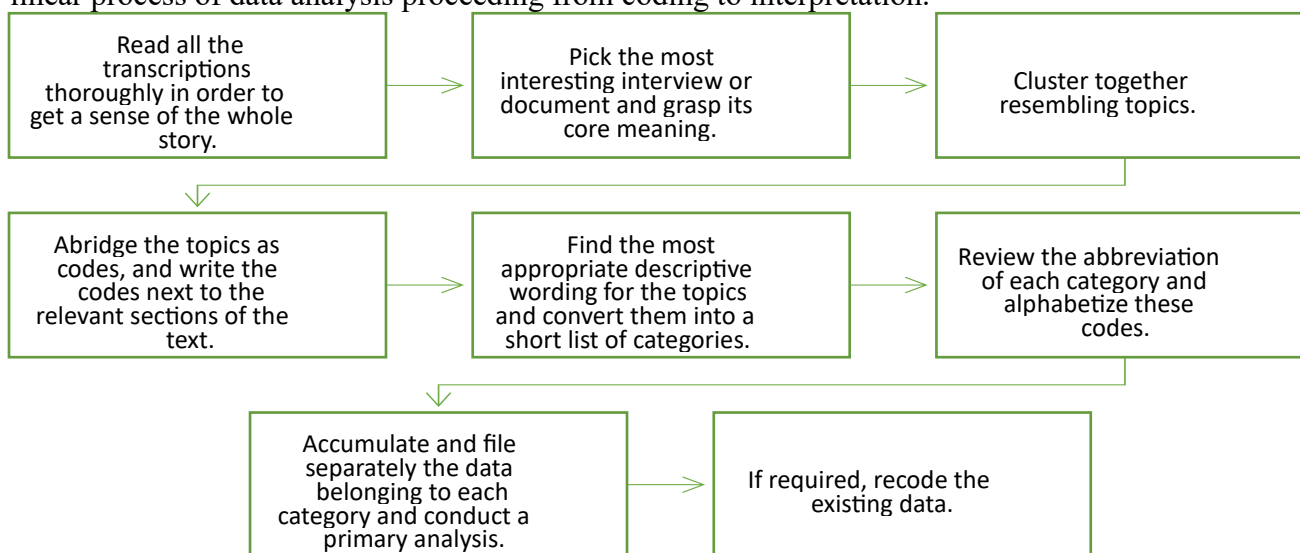


Figure 3: Process of Data Analysis

A case study must also ensure that it accurately reflects and assesses the social phenomenon being investigated. The researcher made every effort to ensure procedural reliability by using recognized research techniques. These included peer reviews, an audit trail, member checks, and a statement of reflexivity. In this study, member checks were employed specifically to increase the validity, credibility, and transferability of the data collected (Marshall & Rossman, 2014; Cypress, 2017). The information or outcomes were sent to the participants, allowing them a chance to check the transcripts and validate the accuracy of the information. To strengthen procedural reliability cross-checks (Yin, 2017) were used whereby the same questions were asked of the various participants in order to verify, clarify and substantiate accounts leading to a more reliable and meaningful interpretation. Additionally, by maintaining all of the study-related data and keeping track of information on paper, the study created an audit path. During the data analysis stage, peer reviewers were utilized to validate the themes and certify that the study had been conducted impartially.

Rather than gradually building up a picture by gathering and evaluating data concurrently (Neuman, 2007; Bengtsson, 2016; Harding, 2018), the researcher chose to tackle the two stages separately. The researcher

deliberately chose not to anticipate conclusions or form suppositions based on limited data, preferring to wait until all of the data had been collected before analyzing it and constructing a comprehensive picture of the setting.

4. RESULTS AND DISCUSSION

The findings from all three data sources were used to build up a picture of the extent and effectiveness of the forces that support organizational learning in a military organization. The central research question and sub-questions were designed to explore the extent to which the case organization's current vision, structure, culture, leadership and learning capability impact its organizational learning. Findings from this qualitative and interpretive case study identified a number of important characteristics, forces and processes that support organizational learning, and which can be collectively summoned by leaders' intent on transforming the military organization into a learning organization. This section discusses the data findings in respect of the conditions or forces enabling organizational learning within the military organization.

4.1 Organizational Transformation- Vision-Culture-Structure

The study was unable to locate a statement that expressed the organization's shared vision for strategic learning or its aspirations to transform itself into a learning organization. There was no clear indication that the leadership of the case organization was particularly concerned about or supportive of the concept and vision of a learning organization. It appeared that the advantages and importance of being a learning organization were not broadly understood throughout the case organization, suggesting that the organization may have failed to recognize the considerable advantages of becoming a learning organization. Learning needs to be explicitly declared as a strategic priority in the vision statement; otherwise, it is difficult to see how learning can establish itself as a key determinant of the success of the organization. A shared vision with clear strategic goals that shape organizational policy will help neutralize opposition to change. The organization's leadership needs to enlist the support of all members in agreeing to a shared vision that unambiguously identifies with a community of learning.

The culture of the organization was one in which ongoing learning did not receive the level of attention it deserves, and learning opportunities were often viewed as an additional option rather than as part of an integrated, organization-wide policy. Learning needs to be prioritized so that favorable conditions for organizational learning can be established across the organization. In terms of the prevailing culture, there was insufficient emphasis on encouraging employees to learn independently, think creatively and work collaboratively in ways likely to lead to better results. The organization needed to do more to create a climate in which employees are encouraged to challenge their own ways of thinking as well as that of others. The culture was one that tended to reprimand and blame people for mistakes rather than unlock the learning potential from a careful examination of what went wrong and why. Among participants, there was general agreement that a strong, supportive learning culture does not exist, and that matters concerning training and professional development should be given a higher profile, with greater investment in human capital development.

Subtle adjustments need to be made affecting attitudes and behavior so that the culture is more receptive to critical or dissenting voices. Alternative ideas were not always given a fair hearing, and lessons learnt were not always implemented due to a residual resistance to change, indicative of unreceptive mental models, and a learning culture in need of greater direction from the top.

Individuals and teams will need to be regularly encouraged to learn from one another, learn from others outside the organization, and share learning outcomes in a variety of ways. It is imperative to create an ethos that is more open-minded to alternatives and encourages continuous collective learning with knowledge sharing. The kind of environment created will feed into the culture and vice-versa. Leaders should be committed to establishing a non-threatening environment that encourages people to challenge traditional ways of doing things, ask tough questions, be proactive and take risks without fear of making mistakes. The ideal environment is one in which employees are empowered to challenge the status quo, and where there is respect for and tolerance of conflicting ideas and opposing opinions. The results of the document evaluation showed that new ideas, no matter where they come from, merit a fair hearing. Internally, efforts must be focused on developing stronger communication channels and a culture that welcomes the thoughts, aspirations, and contributions of individuals who don't currently hold positions of authority.

All of the elements associated with organizational culture such as mental models, values, beliefs and behavior will need to be modified incrementally over time by extolling positive features such as individual empowerment, inclusiveness collective ownership and openness, while discouraging outdated and discredited attitudes and practices. The emerging culture should be one in which employees are encouraged to identify and isolate obstacles to collective learning that impede progress. This will be a long-term project as the analysis of organizational culture suggests that it can take anywhere from three to ten years to effectively change the dominant culture of a large organization (Kotter, 2012).

Some examples of hierarchical organizational structures with functional rigidity and centralized command and control systems were found in the document review and commented on by participants in the interviews. These structures were by default likely to impede the flow of knowledge and information among the various departments and branches of the organization. Some of the key organizational learning elements such as knowledge sharing, employee empowerment, creative thinking and innovation were all adversely impacted by excessive central administrative control, intended to ensure a high degree of uniformity. A good example of this type of structural interference could be seen in the way performance evaluation, professional development, and career planning were handled by some section managers whose preferred channel of communication appeared to be a top-down command and control approach that did not encourage an open dialogue. The opinions and concerns of prospective trainees were often not given sufficient airing, and sometimes not heard at all. Individuals were often left out of the loop in deciding their professional learning needs and were not always involved in post-training evaluation. Individual members of the organization should be given a greater say about matters affecting their

future careers. Employees who feel that they have not had sufficient opportunity to voice their concerns and communicate their aspirations are likely to feel aggrieved resulting in lower levels of motivation and job performance. Adjustments to the structure to allow for more bottom-up channels of communication would go some way to addressing these concerns.

The current incentivization system was also seen to be a casualty of the hierarchical organizational structure as it lacked the input of a wider, more representative body of the organization's membership for whom it was largely intended. Data collected during the interviews suggested wide support for a system that better recognizes employee contributions modelled along the lines of those in the corporate world, where rewards are more finely attuned to the aspirations and expectations of employees. Motivation will be given a significant boost with structural and cultural changes that bring greater participation and dialogue, enabling employees to become more involved in the daily running of their departments, and creating a greater sense of empowerment in matters affecting their own career progression. Leaders need to acknowledge the link between wider participation, higher levels of motivation and the greater contribution brought about by policies that better incentivize and empower people.

Structural change that addresses some of the drawbacks inherent in a hierarchical system is likely to boost inclusivity and well-being and feed into higher levels of motivation. A more decentralized structure which delegates responsibilities to the lower echelons of the organization will empower more members to voice opinions, experiment with ideas and contribute to decision-making. An appropriate initial step would be for the military organization under study to respond to the pressures of mimetic isomorphism (DiMaggio & Powell, 1991) and closely examine the organizational structures of successful institutions in the corporate and defense sectors, with a particular focus on the extent to which they are able to establish efficient systems of empowerment and communication.

4.2 Learning Dynamics

The ability of an organization to learn may be assessed in terms of the impact that learning has on team and individual thinking, as well as the alteration of mental models, values, attitudes, and organizational behavior. The enhancement of individual and organizational performance is an important goal of organizational learning.

There was no explicit affirmation on the part of the organization's leaders during informal conversations and interviews that the promotion of learning was one of the organization's strategic goals. An analysis of data from documents also revealed an absence of any statements or notifications from the leadership advocating continuous learning or rewarding innovation. Data from the documentary review also indicated shortcomings in respect of a lack of systematized and in-depth analysis of job descriptions based on professional competencies, skills, knowledge, and qualifications needed to perform a job. The disparity between what is being done now and what should be done is referred to as training needs. In the absence of a system that ensures rigorous needs analysis and review, it is possible that at least some of the information pertaining to jobs will be erroneous and out of date,

and future targets will not be met. There is a need for a comprehensive training policy based on system-led analysis to identify and evaluate the training needs of individuals and groups throughout the organization in order to improve the quality and effectiveness of educational and training opportunities.

While organizational learning and training needs were often partially met by some departments, they were not always adequately integrated with training initiatives throughout the entire organization. Informal conversations with personnel revealed that training was at times arranged at the request of department leaders and was therefore carried out independently of a more coherent organizational strategy. At the same time, departmental managers' ability to take initiatives in the interests of their section was curtailed by the hierarchical structure of the organization which required them to gain approval from the Head of Training and the Commander. Learning needs to be seen as a collective force for positive change and innovation, rather than in terms of a succession of isolated efforts made by individuals selected to attend courses and conferences.

Details of training programs were not always systematically recorded for quality control purposes, and results were not always measured and available for statistical analysis. Training and up-skilling within the organization would benefit from a more robust and integrated system for assigning, tracking, recording, evaluating, and receiving feedback on learning and training opportunities without which it is difficult to provide a comprehensive assessment of their effectiveness and suitability to members across the organization. On the positive side, there was ample evidence of opportunities for professional development throughout the organization. However, these were often limited to specific staff members at specific organizational levels. The case organization does have good internal training facilities for several specialized trades, and policies and plans in place to send its managers, leaders and some rank-and-file employees to well-reviewed courses both in-country and abroad.

There was some evidence that some staff members benefited from a self-development plan. However, personnel did not always have a say in the kind of further training and professional development they believed they needed to carry out their jobs to a high standard. This prevented them from being proactive in advancing their careers. There were, however, exceptions with some sections seeking feedback from their members at the end of training courses and encouraging them to share knowledge gained with their counterparts.

Data from the study showed that it was individuals belonging to the flying, operational, and technical trades and branches who had the greatest access to computer-assisted learning and training programs. Members of these branches were able to benefit from training programs using sophisticated, state-of-the-art technology and software, and were able to enhance the operational agility of the case organization as a consequence of this training. Personnel in other trades and branches, however, were not routinely given the same opportunities to improve their Information Technology (IT) skills in the areas most pertinent to their needs. Additionally, IT resources weren't always extensively accessed or utilized to their fullest capacity. In order to provide a more effective information flow between employees, and to take account of the present demand for online

communication and conferencing, there is a need to encourage wider and smarter use of information technology systems.

Certain qualities associated with organizational learning were evident in the processes adopted in After Action Reviews (AARs) and Pre-Flight Reviews (PFRs). Learning processes such as these that emphasize error detection and correction, along with trust and mutual respect, were reported in several studies to favorably impact the performance and readiness of a military organization (Lipshitz et al., 2006). These processes were seen to impart substantial benefits to the organization in terms of improving performance, changing the way personnel think, and having a more durable effect on behavior by promoting inquiry and dialogue, and encouraging self-criticism and reflection in a climate free of blame. Several interviewees observed that despite their huge learning potential, they were not an integral part of organizational learning strategy and were not replicated widely enough in the various branches of the organization which appears to be an omission common in military organizations across different service formations (Fastabend & Simpson, 2004).

Along with expanding the learning exemplified in the approach to AARs and PFRs, there was also a need to experiment with other types of adult learning methodologies, such as adaptive and generative learning, that tap into past experience and the experience of others, that encourage participants to reflect, think independently and ask the right questions. More needs to be done to incorporate game-changing strategies such as these into the culture and training policies of the organization. Greater efforts are also needed to share learning outcomes within and across departments, echoing calls for greater transparency and broader channels of communication. This will help the organization to develop a sustainable momentum to learn and work collectively. It is crucial that important lessons learnt are not only shared but permeate the organization's culture and become institutionalized in for example standard operating procedures. A number of participants highlighted the need to develop problem-solving and decision-making skills among a wider section of the workforce and encourage creativity, innovation and experimentation. Crucially, the organization needs to give greater precedence to double-loop learning as the deep-rooted changes it engenders act as a driving force behind the modification of culture, values, attitudes, organizational behavior, policies and objectives. This sophisticated form of learning, which is in part embraced in the approach to AARs and PFRs, is based on an uninhibited exchange of information and knowledge. It could be usefully employed to support better problem-solving and decision-making skills because it promotes a reflective sense of learning, boosts creativity and empowerment, and is likely to lead to better informed decisions and a greater readiness to respond to changing circumstances.

Figure 4 presents the five characteristics that Garvin (2003) set for a learning organization. Military organizations that successfully implement open and cooperative and collective learning processes like AARs and PFRs and benefit from their lessons appear to match these criteria.

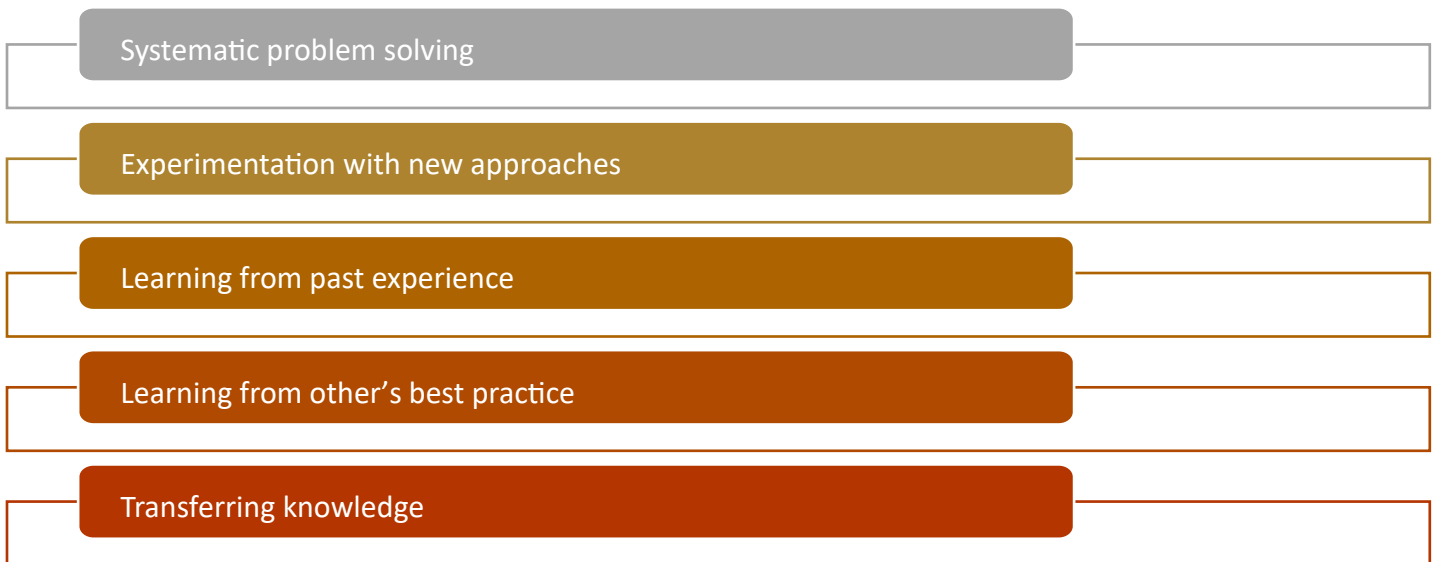


Figure 4: Garvin's Five Key Activities of a Learning Organization

The results of the interviews seemed to back up the claim that a team can only learn as a whole when its members work together to advance their own knowledge (Dixon, 2017). It is likely that the combined impact of collaborative learning affects the organization at all of its different levels, from the individual to the squadron to the base to the organization as a whole. It seems that the organization did not manage to fully integrate learning opportunities and organizational learning outcomes into everyday operations, programs, or strategy. A tendency to confine personnel to their restricted domains of responsibility also appeared to have a direct impact on their knowledge and experience by preventing them from building up a more complete picture of the nature and scope of the organization's challenges. Facilitating the integration of learning processes into the culture and dynamic environment of the case organization, and extending opportunities for individuals to contribute will help the military organization become a learning organization.

The study's findings seemed to indicate that this particular military organization has the potential to transform itself into a learning organization by endorsing and widely implementing organizational learning processes such as AARs. These, however, would not suffice on their own, and are merely one of many significant pieces in the complex picture of creating and managing a learning organization which must demonstrate a long-term capacity for collaboration and learning (Sullivan & Michael, 1996), as well as an openness to change and an ability to innovate (Sidani & Reese, 2018; Örtenblad, 2018).

The organization under study employed benchmarking techniques to evaluate the successes and failures of other organizations both locally and internationally, which is another example of its willingness to bow to the pressure of mimetic isomorphism (DiMaggio & Powell, 1991). Garvin (2003) strongly urged the use of other organizations

as models for best practices when he claimed that not all learning results from looking inward and conducting introspective self-reflection. The military organization under study participated in learning and training events and exercises both regionally and internationally along with other military organizations, as well as academic and professional entities. This is something that the organization should build on as there is much to be gained by comparison with other successful organizations resulting in the implementation of positive change (Mehta, 2019).

4.3 People Empowerment

Transformational leaders believe in the delegation of responsibility and the empowerment of followers. Horner (1997) stated that the concept of empowerment represents a spiritual force that lies in the self, grows gradually and is not responsive to the traditional tools of management (i.e. training, guidance, control, and material incentives).

Employee empowerment needs to be reinforced throughout the organization, by addressing structural and cultural issues. Organizations that provide their staff with a degree of autonomy and control over their daily tasks are exhibiting employee empowerment. Employees must also be given the necessary resources and equipped with the necessary competencies, skills, information and knowledge to enable them to make the best decisions if they are to be empowered and operate to some extent autonomously. The roles that employees played inside the organization were frequently rigidly defined, which places restrictions on the degree of their empowerment, and could prevent them from exercising discretion or experimenting with new approaches. It will help to boost creativity if there is more flexibility in what employees are allowed to do within their areas of expertise.

The performance evaluation system used for human resource management in the case organization appeared to be more focused on rewards and sanctions than on learning, development and empowerment, which is a finding typical of many organizations (Peddler et al., 1991). The empowerment of individual members was impacted adversely by the fact that in matters of job evaluation/performance reviews, career planning, and personal and professional growth, individuals were not given a big enough voice in helping to determine their ongoing learning and professional development needs. By providing opportunities for greater participation and more effective training, leaders can begin to change how personnel feel about themselves and their working environment. With greater empowerment and concomitant higher levels of motivation, individuals will come to see their personal development as a major contributor to the overall advancement of the organization in which they serve.

4.4 Knowledge Management and the Application of Technology

A key component of an organization's learning capabilities is an efficient knowledge management system that enables it to access, process, use, and manage acquired knowledge. Data captured in the review of documents pointed to the need for the case organization to keep up with advancements in information technology so that databases and information communication systems remain up to date and efficiently managed. Employees need to benefit more from shared knowledge, and there is also a need for greater transparency and openness, particularly in regard to justifications for decisions.

Informal conversations and observations in the various branches of the organization provided ample evidence that there was an efficient system in place for managing the existing IT system. The technical employees carried out their duties with a perceptible level of trust and respect, and the system seemed to perform efficiently. The IT department held regular meetings where tasks were reviewed and special attention was paid to sharing the lessons learned, especially with regard to solutions to problems. Learning from both mistakes and successes, which is one of the key traits of a learning organization, was one of the main objectives of these meetings. It is a practice that needs to be extended and applied across the entire organization.

Another example of meetings affording opportunities to exchange information were the daily morning briefings and weekly meetings attended by the organization's directors and commander. These sessions afforded senior managers the opportunity to keep up to date with events in the various sections of the organization and to exchange ideas. They were seen as an efficient way to harness group energy, cement bonds and share information. Participants regarded the regular meetings as a catalyst for the different departments to collaborate to realize the organization's strategic plan. Minutes taken during these meetings need to be recorded, analyzed, saved and disseminated as part of a technology-driven system to share knowledge and build organizational memory.

The military organization under study also needs to harness technology to enhance its capacity for observing and recording trends and developments occurring in other organizations. The IT system should be upgraded so that important knowledge obtained as a result of benchmarking and participating in international conferences is codified, saved, integrated, and made accessible to those who need it. The leadership should also raise employee awareness of the need to record significant organizational learning outcomes and pass relevant information and know-how on to others who might benefit from it.

The case organization did engage in the transfer of information by way of its existing IT system, the systematic work rotation across departments and branches, weekly and in some cases monthly meetings and on-the-job learning and training programs. Unfortunately, these systems were not sufficient in and of themselves to guarantee that significant knowledge was consistently recorded and properly stored. As a result, many workers were only partially able to benefit from the lessons learned by their peers. The absence of a rigorous knowledge management system meant that there were insufficient measures in place to prevent knowledge from being withheld or lost, and to ensure its effective transfer and safekeeping. Observations of the building and the people working in it provided further evidence to support the findings from the review of documents in respect of a need to invest in new, more powerful knowledge management systems. This is necessary to ensure that important knowledge is coded, stored, and made accessible to those who can benefit from it. Knowledge is acquired gradually over time through a variety of channels including funded courses, conferences, operational duties, etc. The organization needs to show how highly it values knowledge acquisition by making sure that it belongs to the entire organization rather than just specific individuals. Knowledge obtained by individual members must be shared, used and retained in ways that enable it to be accessed and expanded on by others. Organizational learning appears to

depend heavily on developing a clearer understanding of the process of institutionalization. The case organization's leadership must appreciate how organizational learning occurs, and how the outcomes of organizational learning are incorporated and institutionalized in their organization. They should ensure that all staff members understand the enormous significance of a collective knowledge bank built through organizational learning.

5. IMPLICATIONS AND RECOMMENDATIONS

By presenting findings applicable to a military organization, the study fills a vacuum in the literature of the learning organization. It offers a description for leaders and strategic practitioners of the conditions that need to be established to support organizational learning when a military organization transforms itself into a learning organization. In order to understand how organizational learning is institutionalized, the study draws on neo-institutional theory (Di Maggio & Powell, 1983) which examines the way in which social, cultural, and cognitive elements contribute to the establishment of institutions and influence their development. Organizational change is also looked at through the lens of Laughlin's (1991) tripartite framework and four other prominent models that offer a framework for building a theory of organizational learning leading to change. These include the 4Is framework of Crossan et al., (1999), Senge's (1990) model of five disciplines, Marquardt's (2011) systems learning organizational model, and Garvin's (2003) model of five key activities for a learning organization. An understanding of the concepts underlying these models served to provide additional support to the interpretation of findings from this study. Connections were made between these frameworks and models and institutional theory to elucidate the processes of organizational learning leading to organizational transformation and strategic renewal. It is hoped that fresh insights will emerge as a result of the findings supported by an understanding of how the various frameworks and ideas are interconnected, support one another, and when combined, create a realistic and persuasive roadmap for transformative action.

A review of the literature suggests that there have been comparatively few studies that have employed more than one theoretical approach to investigate how and why organizational learning and organizational change occur. This study's holistic methodology seeks to avail of a wider pool of theoretical support to better understand the complexity of the research problem. The study demonstrates the relevance of theory to practice by establishing an explicit connection between an effective organizational learning process and the institutionalization of learning outcomes, without which it may be impossible to realize the full potential of what has been learned (Crossan & Bedrow, 2003). The study found evidence that the theoretically based empirical frameworks (Senge, 1990; Garvin et al., 2008; Marquardt, 2011) could be applied to the context of a military organization where factors for and against organizational learning were seen to be present. The findings from this study may be further expanded by applying the models and theoretical frameworks to other public sector organizations.

In addition, by offering insights into organizational learning in a military context, this qualitative case study contributes to the body of literature as a whole. It is suggested that future research extend the findings of this study in the following ways.

- The use of a mixed-methodology approach to investigate how organizations embody the qualities of a learning organization, paying particular attention to those outlined in Marquardt's (2011) Learning Organization Profile, and to quantitatively evaluate the perceptions held by organizations of their effectiveness as learning organizations (Lopez et al., 2005). A mixed-methodology approach is likely to help the researcher get a more comprehensive understanding of the phenomenon by fostering an all-encompassing perspective of the issue being investigated.
- The addition of further levels of analysis to assist in identifying what individual members of an organization think about aspects of organizational learning within their organization. This study restricted itself to the opinions and perceptions of the top echelons of management. Multiple levels of analysis, including more middle-ranking and junior members, may be especially helpful for military organizations because of the numerous gradations of rank (Crossan et al., 2021).
- Coercive, mimetic, and normative pressures identified in institutional theory could be further examined in terms of the impact they have on organizations and organizational learning. There is more to be learnt about how organizations react to these external forces, and how these pressures act independently, or in concert to bring about organizational change.
- The creation of a learning organization is thought to be fueled by the following factors: vision, culture, structure, leadership and environment. A study that takes a more comprehensive approach and is devoted to a detailed analysis of the contributions of each of the components to organizational learning (looking at each one separately) would provide a level of detail not seen in the present study.
- An examination of how the essential enabling factors of organizational learning affect the various branches or stations at different sites within a single organization or across a number of military organizations.
- An exploration of how learning organizations are set up in different industries, settings and societies to determine what they have in common and the extent to which they differ. This could contribute to a better understanding of what makes a learning organization effective.

6. CONCLUSION

This qualitative, single-case, descriptive study sought to better understand how the concept of the learning organization might be applied to a military setting. The study sought to clarify what a learning organization is, and offered a theoretically supported path for instigating the kind of changes that lead to successful organizational learning typical of a learning organization. The study was principally concerned with the feasibility of transforming the case organization into a community that values lifelong learning, promotes innovation and change, and gives all serving members the freedom to say what they think, to take the initiative and participate

in decision-making. Data gathered from multiple sources revealed forces at play within the organization that could be built upon to change organizational culture and support effective organizational learning. The research results demonstrated how learning needs to be encouraged to penetrate different organizational levels, from individuals to teams to the organization as a whole, so that change can be handled in a methodical way to help the organization realize its shared vision.

In order to be taken seriously in today's world, a military organization needs to cultivate learning and innovation. By building and developing learning capabilities, and implementing sustainable learning systems, a military organization can bring about its own continuous transformation and turn itself into a successful learning organization. Learning can be used to re-engage and revitalize individuals and teams across different sections in a military organization so that they work collaboratively for the benefit of the organization. To do this, an organization needs a supportive culture and an environment that promotes ongoing concrete learning processes, the results of which must be safeguarded, incorporated and institutionalized by an efficient knowledge management system without which the potential gain from what has been learnt may never be realized. All of this must be instigated and reinforced by a committed leadership. Leaders should refer to the various learning organization models for guidance in strengthening their organization's learning capability and consider ways of establishing a shared vision and incorporating into the culture and working environment vital elements such as personal mastery, mental models, team learning, and systems thinking (Senge, 2014). Without direction and commitment from the top, the military organization will not be placed on a sustainable transformational trajectory. For this to happen, it requires transformational leadership capable of regenerating the organization by creating a shared vision and investing in the development of all of its members (Sagor, 1992; Ellinger et al., 1999; Ismail, 2018). Transformational leaders of the military organization under study should begin by adopting a working model of a learning organization to act as a benchmark. A learning organization's evolution is a process of constant learning, adaptation, change and innovation. This military organization's transition to a learning organization is possible if it can tap into and exploit all of the building blocks and interdependent subsystems supporting organizational learning, but the process will inevitably be gradual and incremental.

Limitations of the Study

The case study methodology has some drawbacks, the lack of generalizability being one of the most significant. A further drawback for this single case study of a military institution was its limitation to documentation and artifacts that were not subject to stringent security rules. Assumptions were made and conclusions largely drawn from participants' memories and perceptions which could have been subject to potential bias due to physical, mental, and emotional factors at the time of the interview. Furthermore, an obligation to maintain the anonymity of the military organization meant that specific examples and details of the setting could not be disclosed.

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