Forces Hampering Organizational Learning in a Military Organization: A Qualitative Case Study

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Abstract: **A rigid, traditional, hierarchical organizational structure, typical of many military organizations is no longer seen as effective in terms of anticipating and responding to fast moving changes in the external environment in the modern era. Such structures leave decision-making and directives largely in the hands of a few individuals at the top of the organizational pyramid which is not conducive to the rapid and seamless implementation of policies and strategies in response to changing circumstances. Military organizations stand to benefit if they endorse some of the organizational learning approaches adopted by learning organizations which are better equipped to deal with change. This paper limits itself to looking at the various structural and behavioral characteristics identified in a particular military organization that are deemed to act as impediments to organizational learning and which stand in the way of its potential transition to a learning organization. An examination of these obstacles forms an important part of a wider qualitative, single-case, descriptive study which set out to determine how this particular military organization could turn itself into a learning organization. The study looked at various aspects of organizational learning within the case organization in order to determine the extent to which these corresponded to the way learning is promoted and managed within learning organizations and to identify a transformational pathway towards becoming a learning organization. Data was collected from a document review, observations blended with informal conversations and via in-depth interviews. The findings outlined in this paper highlight the ways in which the case organization was not functioning as a learning organization and identified the kind of transformational policies that need to be put in place.**

Keywords: **Forces Hampering Organizational Learning, military organizations, learning organization.**

1. INTRODUCTION

In the twenty-first century, organizations must be ready to respond effectively to a myriad of challenges. Communities today are experiencing significant pressures and changes in terms of social, cultural, socioeconomic, environmental and geo-political aspects of life. These significant developments are causing an unprecedented upheaval in the daily operations of numerous organizations, both governmental and non-governmental. In order to address the multiple strategic issues that are present at regional, national and global levels, organizations must innovate and re-energize themselves (Zollo & Winter, 2002; Bryson, 2018). Organizations in the public sector have historically preferred a hierarchical structure (Brunsson & Olsen, 2018). This is particularly the case with military organizations where decision-making and the power to issue orders is concentrated in the hands of a few people at the very top. In rigid organizational systems such as these, there is a strong code of conduct that mandates that subordinates carry out directives that are sent to them from the halls of authority (Atuel, & Castro, 2018; Child, 2019). As a result, the more traditional a military organization is, the more reluctant it seems to be about embracing the philosophy of the learning organization (Visser, 2016).

It is widely acknowledged that a quality-focused investment in education and training is key to human resources development (Martin, 2018). This is especially true for organizations that embrace the "Learning Organization" ethos by upholding its values and utilizing the organizational learning process to its fullest potential. Such organizations are supposed to have a distinct mission, implement well-thought-out plans with clear objectives, and create workable policies to address strategic issues (Serrat, 2017). This operational strategy is designed to increase professional longevity and strengthen employee loyalty (Smith, 2012; Senge, 2014; Brencic, 2015). Public sector organizations can benefit by adopting the approaches employed in successful corporate learning organizations. Principal among these would be the removal of the structural and cultural constraints that negatively impact information accessibility and restrict creativity. Organizations would also need to implement and fully exploit a knowledge management system whose justification, traits, goals and particular mode of operation are all well documented in the literature (Dey, 2013; Faltejskova & Dvorakova, 2013; Sharma, 2013; Gao, 2015).

The problem addressed as the core concern of the study lies in the observation that in its day-to-day functions, the case organization did not appear to reflect upon, adopt, practise, master, and incorporate or integrate effectively and sufficiently the essential elements, processes, and strategies of a learning organization. This paper focuses on certain aspects of organizational learning within a military organization that do not appear to meet the standards of a learning organization. This is an area of research that has received comparatively little coverage in the literature to date. The paper provides a brief review of the literature concerned with the forces known to detract from effective organizational learning, the research methodology employed, along with a discussion of the findings and recommendations for practice.

2. LITERATURE REVIEW

The learning organization evolved out of a need for strategic planning, seen as the main driver for strategic change. A learning organization embodies both conceptually and practically the notion of a continuous, transformative process that prepares an organization for future strategic challenges and is key to fostering continuous improvement and innovation within the organization (Yeung et al., 2007; Jones et al., 2014; Senge, 2014; Wheelen et al., 2017). Ang and Joseph (1996) distinguish between organizational learning and a learning organization by defining the former as a process and the latter as a structure. A learning organization is essentially the structure or form of the organization and the way it is set up so that it can promote organizational learning which is a process or activity involving learning within organizations (Örtenblad, 2018). Robbins (2001) defines learning as the process of improving the functioning of an organization through the application of knowledge stimulating and motivating the organization in a manner that transforms it into a "learning organization". The structure of a learning organization affects the organizational learning that occurs within it and vice versa. The two terms are sometimes used interchangeably (Fulmer et al., 1998; Klimecki & Lassleben, 1998). There is wide agreement that the one is dependent on the other, and that they are mutually dependent (Thomsen & Hoest, 2001). For Senge (1990), a learning organization puts people at the center of learning. Senge argues that learning provides both people and organizations with a means of recreating and renewing themselves. He sees people as agents with the ability to make an impression on the systems and structures that are a part of their working lives. He defines the learning organization as: "An organization 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). The above definition suggests the potential for positive growth that can be leveraged within an organization by the promotion of inclusiveness. The potential for self-transformation through individual and collective learning is fundamental to the notion of the 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" (Garvin 1993, p.80). The learning organization employs knowledge generation and transfer to modify organizational behavior, and achieve a higher level of performance in order to facilitate the realization of organizational strategic goals (Garvin,1993). Garvin argued that a learning organization is proficient in five key activities, viz. systematic problem solving, experimentation, learning from past experience, learning from others, and transferring knowledge (Garvin, 2003). Organizations that are able to create effective systems and processes that support, reinforce and integrate these activities in the fabric of daily operations can manage and accomplish learning more effectively, and achieve greater success.
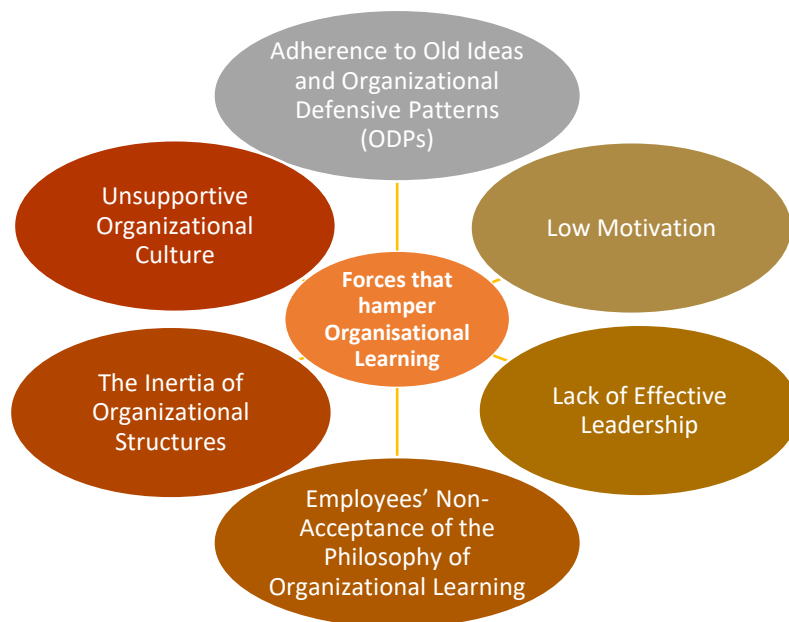
- Systematic problem solving
- Experimentation with new approaches
- Learning from past experience
- Learning from others' best practice
- Transferring knowledge

Figure 1: Garvin's Five Key Activities of a Learning Organization

According to Stata (1989 p. 66), "the rate at which an organization learns may become the only sustainable source of competitive advantage". Yang et al. (2004) describe a learning organization "as one that has the capacity for integrating people and culture to move an organization in the direction of continuous learning and change" (Yang et al., 2004, p.282). Field (2020) states that there can be no organizational learning without individual learning, but individual learning must be integrated, shared and used by the organization to generate knowledge and to modify organizational behavior. Individual learning is therefore a prerequisite for organizational learning (Simon, 1994; Riesen, 2004; Dixon, 2017).

Knowledge management is also an indispensable element for any organization intent to become a learning organization (Gunjal, 2019). Whereas a learning organization is an entity that requires knowledge management, knowledge management is a process that a learning organization assumes. While knowledge management is a prerequisite for building and leading a learning organization, its effectiveness and value are in turn reliant on the successful functioning of the learning organization (Taylor et al., 2019). It is the responsibility of leaders and those in strategic positions within an organization to construct a shared vision, and realize the enormous potential derived from the union of knowledge management and organizational learning (Milton & Lambe, 2019).

A model of organizational management with continuous learning at its core is now widely credited with guaranteeing high levels of efficiency and long-term stability, manifested by the ability to attain the necessary internal transformation, and simultaneously translate this learning into reality-based outcomes (Senge, 2014). A number of common barriers to establishing a structure and environment that prioritizes individual, collective and organizational learning have been identified in the literature. These are illustrated in Figure 2 below and are accompanied by a brief discussion.

Adherence to Old Ideas and Organizational Defensive Patterns (ODPs)

Unsupportive Organizational Culture

Low Motivation

Forces that hamper Organisational Learning

The Inertia of Organizational Structures

Lack of Effective Leadership

Employees' Non-Acceptance of the Philosophy of Organizational Learning

Figure 2: Key Forces Acting Against Organizational Learning

2.1 Adherence to Old Ideas and Organizational Defensive Patterns (ODPs)

Research shows that organizations often fail to learn because managers and executives refuse to make changes to the prevailing culture, structure, and practices (Neves & Schyns, 2018). Serrat (2017) asserts that the rejection of novel concepts results in cognitive patterning, a type of stagnation in an organization's cognitive architecture. To counter this, it is imperative to be open to new information and willing to let go of outdated structures and mental models, even if they have previously shown themselves to be useful. The literature suggests that successful organizations are those that adopt the philosophy of continuous learning, and champion adaptability, improvement, and innovation in order to achieve this. Sadly, it is still the case that there are organizations in which the managers and leaders together with the majority of employees do not have the awareness, skill set or motivation to advocate for systems thinking and systematic change (Yeung, 1999; Crossan & Berdrow, 2003; Alegre & Chiva, 2008;; Senge, 2014; Borwick, 2018; Örtenblad, 2018).

2.2 Unsupportive Organizational Culture

The attitudes and behaviors of an organization's staff, and how well they work together to address problems are reflections of organizational culture. Organizational defensive patterns and routines are undesirable byproducts of corporate culture, impeding organizational learning, innovation, and change (Namada, 2018; Tian et al., 2018; Watkins & Kim, 2018). There are members in some organizations who are inherently anti-change and place limitations on individual initiative (Vince, 2018). According to Kunert and Staar (2018), some of these accustomed behaviors can become so deeply embedded that they are challenging to identify. Such deeply ingrained behavior frequently adversely affects those at the center of power and makes them resistant to change particularly if the ideas are unsolicited. Levitt and March (1988) emphasized that organizations with flawed organizational cultures and mental models may get caught up in a "learning myth" and learn the incorrect lessons, even to the point of equating failure with success.

2.3 The Inertia of Organizational Structures

Every organization must have a structure, but it is essential that it is flexible enough to adapt to the constantly changing environment. Bacharach (2018) argues that it is crucial to ensure that the organizational structure is compatible with the complexity of the environment so that it can respond efficiently to external changes. This entails redesigning conventional structures in favor of more organic ones that combine solidity and flexibility. Organic structures are ones that support decentralization by adhering to both vertical and horizontal communication routes. This implies that decision-making is disseminated more extensively across the hierarchy and delegated. This allows more people to use their skill-sets and carry out a larger range of tasks to complete newly assigned projects (Cravens et al, 1996; Filos & Banahan, 2001; Ogbonna & Harris, 2003; Wijethilake et al., 2018). The utilization of cross-functional work teams is encouraged by horizontal structures and decentralization, which also places a strong emphasis on involving employees in decision-making (Macy & Izumi, 1993; du Plessis & Pretorius, 2018).

2.4 Employees' Non-Acceptance of the Philosophy of Organizational Learning

Another hurdle that stands in the way of the implementation of organizational learning is employees' resistance to it. It is possible that the introduction of a learning culture will not initially be understood or accepted entirely by all of the established members of an organization. Many things could prevent a seamless transition to a learning culture. For instance, obstacles may be put up when management does not pay much attention to or does not respond at all to employee ideas. Conflicting perspectives between management and staff over the organization's overall vision can also cause problems. Additionally, it is unlikely that a successful transition will take place if the organization's former ideology continues to be reflected in both official and unofficial norms, attitudes, and values (Steiner, 1998; Berson et al., 2015; Merzenich, 2017). New capabilities and mechanisms will need to be put in place to reflect a new leadership style and values that foster new attitudes and supportive organizational behavior (Dixon, 2017; Jackson, 2017).

2.5 Low Motivation

Employee motivation is typically seen as a crucial component of organizational learning. This starts with the careful selection and appointment of personnel, with attention paid to ongoing advice and training once they are in jobs that are appropriate for their training, knowledge, skills, competences and goals. High levels of motivation delivered through the use of a suitable incentive and reward system are thought to assure high levels of productivity and job satisfaction. The

transition of an organization into one that enables its entire workforce to engage in and benefit from a learning culture depends in large part on motivation (Locke & Latham, 1990; Wright & Geroy, 2001; Islam & Ismail, 2008; Joo & Jim, 2009; Kirwan, 2016; Potnuru et al., 2019).

2.6 Lack of Effective Leadership

According to Xie (2019), ineffective leadership has a quantitative impact on an organization because there are not enough leaders to manage organizational learning, and a qualitative impact because lack of conviction dilutes values, attitudes, and behavior and affects employees' willingness to facilitate organizational learning. Organizational defensive routines (ODRs) are perpetuated by leaders who do not adopt the proper mental models and lack the confidence to create learning opportunities. Leaders whose behavior is characterized by organizational defensive routines react to inefficiencies and production interruptions by blaming and reprimanding rather than by working together to reflect on and analyze the situation (Berson et al., 2006; Pasamar et al., 2019). Leaders who are not fully dedicated to an idea, and are unenthusiastic about it, are more likely to pass that negative attitude on to their workers, which will result in low levels of intrinsic motivation and fewer learning chances (Vera & Crossan, 2004; Lee & Welliver, 2018; Chou & Ramser, 2019). Strategic leadership support is an essential component in the creation of a learning organization. Leaders can spark a team's passion and give them the tools needed to launch and successfully complete projects and longer-term goals. Leadership is regarded as a key factor in determining organizational culture and structure along with organizational performance.

2.7 Summary

There have been very few studies of the learning organization in a military setting. Most studies of military organizations so far undertaken have involved institutions in affluent nations. These studies did not primarily concern themselves with how military organizations might become learning organizations. Transformation from a traditional to an efficient learning organization within the military sector requires more than simply structural change. Above all, it is the senior leadership that must demonstrate a firm commitment to the concept and goals of a learning organization in order to establish a culture and environment conducive to promoting organizational learning and ongoing development. The adoption of a model of a learning organization to serve as a standard will help to facilitate this transformative process along with the hiring of a skilled and talented workforce appropriately empowered and incentivized (Halachmi, 1994; Hasselbladh & Ydén, 2019; Kremer et al., 2019).
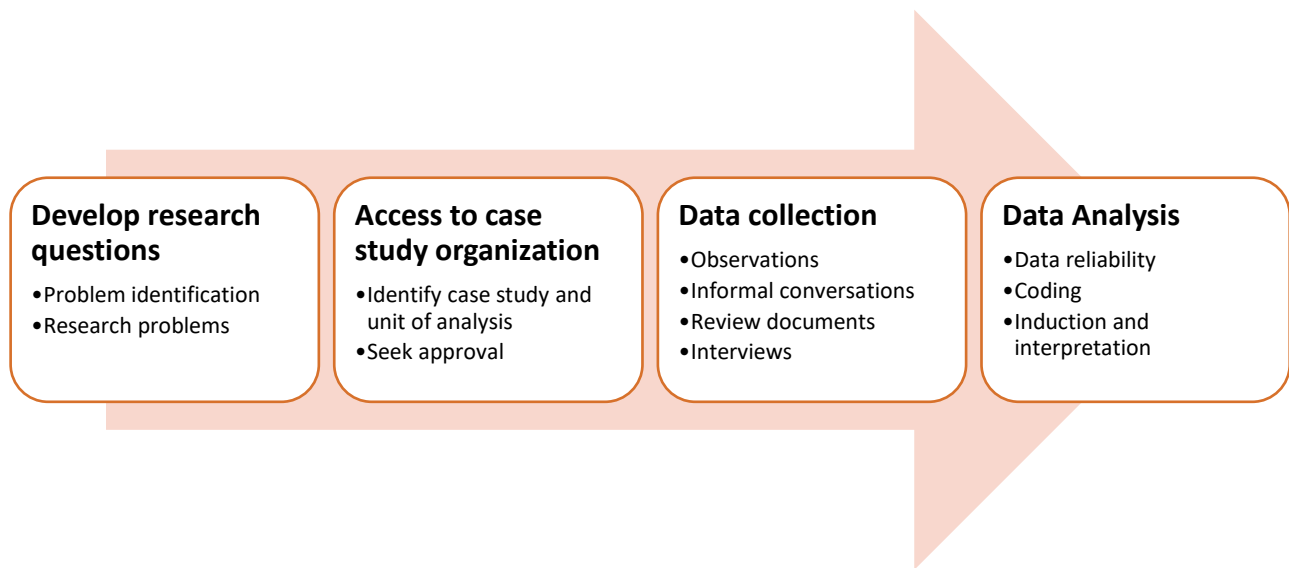
3. METHOD

This study adopted a qualitative approach employing a single case study method informed from an interpretive perspective to answer the research questions. The case study method is appropriate in research that asks "How and Why" questions to develop an understanding of the phenomenon. It achieves this by executing in-depth investigations of a specific instance or situation. It allows the researcher to construct a rich picture of the present situation, and the historical aspects to obtain a deeper understanding. A number of researchers have proposed exploring the construct of the learning organization through the lens of a case study (Kim & Marsick, 2013; Watkins & Dirani, 2013). Such a methodology may well provide practitioners with greater insight into how a military organization, which is highly controlled by a rigid organizational structure and culture, can transform itself into a learning organization.

It also offers an opportunity to capture data from different sources, in this case from semi-structured interviews, observations, informal conversations, and document reviews. The multiple sources permitted a triangulation of data offering a fuller understanding of the phenomenon. The participants were senior officers in the organization under study because leaders are responsible for transforming, building, and leading a learning organization. Informed consent was obtained from participants. The name of the organization, and the names and positions of participants remain undisclosed for reasons of security and confidentiality.

A case study often examines a single unit of analysis, but it may also occasionally aggregate several units (Ryan et al. 2007; Creswell & Creswell, 2017). The military organization served as the analysis unit for the purpose of this study. The study's main goal was to shed light on its subject by creating precise research questions that aim to solve the underlying problems. The research process was designed using the research questions (Neuman, 2007; Korstjens & Moser, 2017). The study

design consists of four essential elements: research questions, access to the case organization, data collection, and data analysis as shown in Figure 3.

Develop research questions
- Problem identification
- Research problems

Access to case study organization
- Identify case study and unit of analysis
- Seek approval

Data collection
- Observations
- Informal conversations
- Review documents
- Interviews

Data Analysis
- Data reliability
- Coding
- Induction and interpretation

Figure 3: Research Methodology and Design

3.1 Research Questions

The research questions stemmed directly from the research objectives and were subject to revision and refinement in the light of data obtained as the case study evolved. Research questions were modified during the interview sessions to reflect the different roles and responses of the interviewees. This degree of flexibility allowed the researcher to obtain a deeper and richer understanding of how the forces acting against organizational learning were impacting the organizational learning process within the military organization under study.
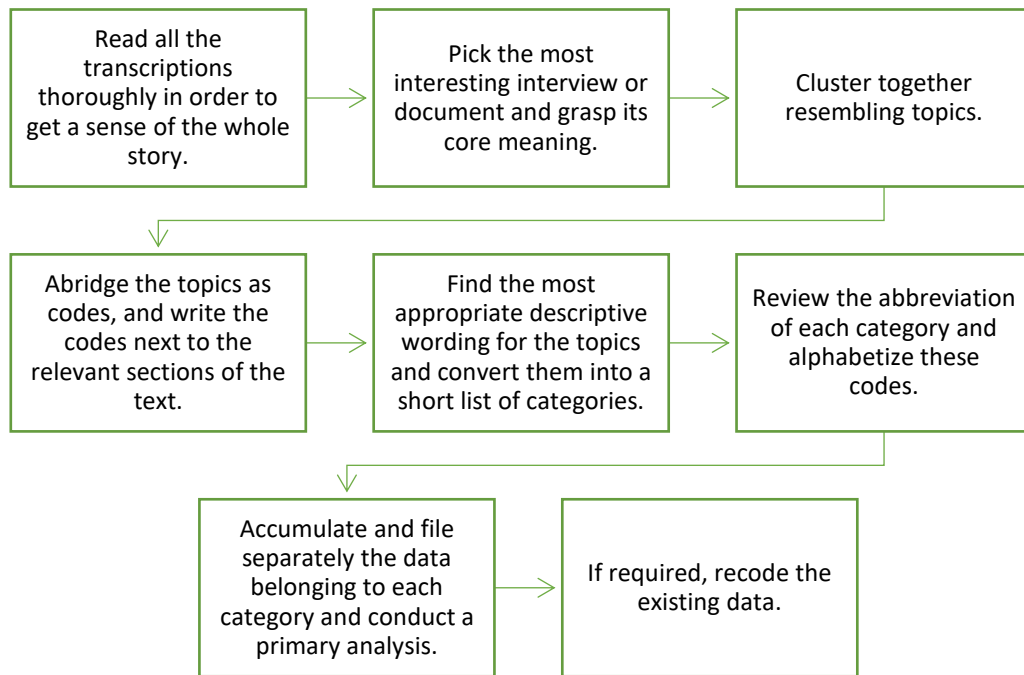
3.2 Access to the Case Study

Access to the military organization was obtained by the researcher who was sensitive to its structure, culture, value systems, environment and security constraints. The researcher generally had unfettered access to all library resources, facilities, bases, and officers' clubs. However, certain restrictions did apply due to military regulations that imposed secrecy obligations particularly with regard to operational details and classified information.

3.3 Data Collection

While the bulk of information relevant to the title of this article came from interviews with senior members both active and retired at the organization's headquarters and other locations, much of what was said was supported by data collected elsewhere from the document review and observations. Semi-structured interviewing was used to allow for more leeway in exploring new ideas, opening up new lines of inquiry, and following up on interviewees' responses. All of the relevant conversations took place in private, either in person or over the phone. A follow-up interview with participants was scheduled when it was necessary to obtain additional information or confirm particular facts.

3.4 Data Analysis

The study employed thematic analysis and used a multi-layered process involving collecting the information from the field, sorting it into categories or themes, creating a picture or story as an aid to writing the qualitative text (Creswell,1994). In qualitative research, data collection and analysis are typically carried out simultaneously (Myers, 2009; Harding, 2018). As more raw data is collected, screened and arranged, charts and diagrams can be used to reflect the various patterns emerging from the data, connecting and interlocking the different themes and gradually building up a more complete picture of the organization (Coffey & Atkinson, 1996; Scapens, 2004; Creswell, 2007; Harding, 2018). Figure 3 illustrates the linear process of data analysis proceeding from coding to interpretation.

Read all the transcriptions thoroughly in order to get a sense of the whole story.	→	Pick the most interesting interview or document and grasp its core meaning.	→	Cluster together resembling topics.

Abridge the topics as codes, and write the codes next to the relevant sections of the text.	→	Find the most appropriate descriptive wording for the topics and convert them into a short list of categories.	→	Review the abbreviation of each category and alphabetize these codes.

Accumulate and file separately the data belonging to each category and conduct a primary analysis.	→	If required, recode the existing data.

Figure 4: Process of Analyzing the Data

Qualitative research relies on the researchers' perceptions, understanding, interpretations and involvement with the subject matter. In order to strengthen the trustworthiness of the interpretations arrived at by the researcher, a number of techniques were employed to ensure greater procedural reliability. Cross checks (Yin,1994) were used whereby the same questions were asked of the various participants in order to verify, clarify and corroborate accounts leading to a more reliable interpretation. The researcher employed the triangulation technique (Scapens, 2004; Flick, 2018) which necessitated additional interviews with the same participant to strengthen knowledge and interpretation and determine validity. Additional techniques strengthening the validity and transferability of the evidence (Cypress, 2017) were also used. An example of this involved participants being encouraged to review the transcripts of their interviews and to verify their accuracy. Additionally, the study provided an audit path by retaining paper and digital records of all study-related data.

4. RESULTS AND DISCUSSION

The problem identified as the core concern of this study was that the case organization does not appear to adhere to the essential principles and practices of a learning organization. Data analysis arising from the qualitative and interpretive case study identified a number of important factors hindering organizational learning and preventing a smooth albeit gradual transition to a learning organization. These obstacles which are the focus of this paper are outlined in this section.

4.1 Factors Inhibiting Organizational Transformation

4.1.1 Shared Vision

All three sources highlighted the glaring omission of the concept and guiding principles of a learning organization in the Vision Statement. There did not appear to be a statement declaring a shared vision which involved learning, nor was there any stated aspiration to become a learning organization. The overwhelming majority of the interviewed participants representing a cross-section of the leadership had no sound understanding of or commitment to the concept and philosophy of a learning organization. A shared vision is one of five prominent disciplines referred to by Senge (1990; 2014) as key components for developing learning capabilities within a learning organization. Given the symbiotic relationship between the learning organization and organizational learning, it should not be surprising to note that learning opportunities in the organization as a whole were often under-exploited, and the value of continuous learning was not fully appreciated in respect of its potential contribution to improvement and change. The document review, for example, was unable to uncover any overarching statement from the leadership declaring learning to be one of the organization's strategic objectives.

4.1.2 Structure

Military organizations that follow stringent chain of command-and-control systems naturally assimilate some cultural and structural barriers into their system that run counter to effective communication and collaboration, both horizontally and vertically throughout the organization (Hasselbladh & Ydén, 2019). A military hierarchical organizational structure cannot be expected to unreservedly support organizational learning processes that feed off a dynamic flow of knowledge. Leaders would need to be persuaded that a hierarchical and heavily bureaucratic apparatus suffers from a degree of inertia that denies it the degree of adaptability and responsiveness to change that an organization should embody when dealing with fast-moving and dynamic situations. Structural rigidity, manifested in part by a top-down, centralized command and control system, can become an impediment to the smooth flow of information and knowledge through the different departments and branches, thus impacting organizational learning. This was identified as an obstacle by several interviewees who recognized that putting too many restrictions on the dissemination of information can also undermine collective responsibility and empowerment by limiting the extent to which members of the organization can see the bigger picture and become more involved in contributing to finding solutions to the challenges facing the organization. All three data sources provided evidence of cases where the points of view of employees were not always taken into consideration, or where they were excluded from the decision-making process.

Data from the Document Review suggested that a number of policies, such as those related to performance assessment, professional development and career planning were all adversely affected by the top-down command and control mechanism. The perceived paucity of adequate consultation and representation, due to what may be termed a structural weakness in the organization, was seen as having a negative impact on motivation, creativity, innovation, job satisfaction and performance at all levels.

It is a fact that military organizations are primarily meant for combat roles, but they are not always at war, or in a constant state of heightened alert. There is, therefore, every likelihood that something can be done during peace time, to bring in structural changes that reinvigorate the culture so that there is a greater willingness to share information, and to enlarge participation in decision-making. The observations of the interviewees in this respect reflect the findings of Gupta et al. (2018), who found that not all state sector organizations have been successful in responding to changes, and many are still constrained and regulated by the rigidity of the policies, regulations and procedures associated with old-time organizational structures and cultures.

Structural reform leading to wider participation could be initiated by looking at how successful organizations in the defense industry and corporate world are structured, and the extent to which they manage to create effective systems of communication and empowerment. The decision-making processes need to be opened-up, made more transparent and inclusive. By allowing employees other than those at the top to play an active part in problem-solving and arriving at important decisions, the organization will address a major disqualifying factor in its path to becoming a learning organization.

4.1.3 Learning Dynamics

It is possible to define an organization's learning capability as its capacity to participate in learning at all organizational levels. These encompass the levels of the individual, the team, and the entire organization. This competence can be measured by how well learning outcomes are transferred from one level to the next such that the entire organization prospers. The ability of an organization to learn can 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 the goal of organizational learning. A key component of an organization's learning capabilities is an efficient knowledge management system that enables it to access, process and utilize stored knowledge.

Organizations that want to improve their capacity for learning should look at how key aspects of organizational learning occur within a learning organization. Despite the majority of interviewees acknowledging the importance of prioritizing learning, this claim was not anchored in an understanding of what it is to be a learning organization.

An organizational learning strategy is key to identifying and determining the capabilities, competencies and skills that are required by the workforce, and to constructing a roadmap for their further development and sustainability. The objective of such a strategy is to ensure optimal investment in human capital development across the organization. Organizational learning is dependent on multiple factors, including the structure of the organization and the systems employed as well as the culture. The absence of a designated learning and development entity within the case organization, responsible for

developing and implementing learning strategy may be seen as a significant contributor to many of the organizational learning shortcomings identified in the study. Some respondents also called for a more decentralized system that gave greater autonomy to organize training opportunities that matched the individual needs of departmental staff.

The lack of a consistent policy governing all aspects of organizational learning and professional development was aggravated by a general absence of comprehensive job descriptions based on a detailed and systematic job analysis. This meant that the various education and training opportunities did not always correspond to the specific training needs of individuals and groups. It was pointed out that learning and training opportunities should not be imposed on individuals, but that a more consultative approach to career development would work better and be more in keeping with the ethos of a learning organization. It was felt by many of the respondents that leaders and managers in the case organization should make more effort to involve their employees in the process of analyzing their training and development needs as well as the post-training evaluation process. Here, they should have an opportunity to assess the results of their learning, and benefit from feed-forward suggestions for their future training. Employee participation in setting out a pathway for ongoing professional development is an established principle of andragogy and key to creating a more highly motivated and participatory workforce.

In terms of systems, particularly those governing knowledge management, data from all three sources revealed that there was an absence of an integrated system for assigning, tracking, recording, evaluating and obtaining feedback on learning opportunities, which made it very difficult to obtain an overall assessment of the effectiveness of training and organizational learning. This led to some of the gains made going unmeasured and unrecorded, leading to gaps in organizational memory and difficulty evaluating the effectiveness of training programs.

Findings from the interviews revealed an absence of a systematic approach, together with effective instruments to detect, monitor, analyze, understand and embrace external changes. Opportunities were often missed to learn from interaction with some of the organization's external partners such as subcontractors and suppliers. Interviewees put this down to an absence of policy governing dealings with external companies. Seeking out and learning from reputable reference groups, particularly in challenging circumstances, is congruent with the mimetic isomorphism described by DiMaggio and Powell (1991).

There was little evidence of programs that emphasized creative thinking and working collaboratively. A number of interviewees expressed support for a wider application across other branches of the organization of learning processes, such as "After Action Reviews" (AARs) and Post Flight Reviews (PFRs) deemed to have been especially beneficial in terms of identifying problems and solutions, rectifying mistakes and defects and assimilating best practice. Findings from earlier studies detail the advantages of learning through error detection and correction, trust, mutual respect, and interdependence among participants (Lipshitz et al., 2006). These potentially powerful learning processes need to be conducted in an atmosphere supportive of openness, enquiry and critical thinking where participants are encouraged to ask the right questions without fear of judgement. Studies carried out in the US Army by Fastabend and Simpson (2004) also showed a marked reluctance to adapt and exploit these learning opportunities more widely across all service formations.

A number of the participants mentioned instances in the case organization where failing to apply the lessons learned in a timely manner may have jeopardized the level of success of an operation or project. This type of failure tends to be symptomatic of a culture in which there is an unwillingness to abandon outdated mental models and accept changes that involve a radically different way of approaching problems and bringing about enhancements (Argyris, 1990). This suggests that learning in the case organization is currently often inhibited by attitudes and behavior determined by the current culture and structure, and more needs to be done to counter these impediments in the interests of more dynamic and effective learning.

Relinquishing old mental models is one of the main features of a learning organization (Senge, 1990; 2014). Leadership of the organization under study would do well if it pays greater attention to training individuals and teams to learn how to learn and think outside the box, and to allow critical and innovative thinking to take place. The case organization needs to encourage its employees to see events and actions as an opportunity to find new ways forward, and in some instances, this may involve radically changing the way they think about the issue concerned. Once lessons have been learnt, it is crucial that they become embedded in organizational memory so that they begin to permeate the organization's culture in terms of adjustments to routine procedures, standard operating procedures (SOPs), battle doctrine and organizational and professional behavior. It is crucial that the lessons and subsequent changes are acknowledged, recorded, internalized and integrated into day-to-day affairs.

Some of the participants were in favor of leaders giving greater prominence to reflective practice, during which mental models can be examined and employees can focus on such areas as problem identification and problem solving through critical thinking. This finding is significant for the reason that both Garvin (2003) and Senge (2014) believe that leaders and mangers should encourage employees to develop a capacity to analyze and reflect on their learning and actions. Learning by reflecting on one's own past experiences and other people's best practices and insights in a spirit of inclusiveness, helps generate new ideas and achieve personal mastery. When key positive behaviors are adhered to, leadership and employees are more likely to develop additional ways to integrate and reinforce them.

Dixon (2017) asserts that an organization learns only when its individual members learn collectively as a team. A number of the interview participants suggested that learning processes involving an entire team, that can lead to telling revelations and significant improvements, did not occur regularly or widely enough in the various trades/branches throughout the organization, and was not managed in a systematic way. Any organization, be it commercial or military, that aims to become a learning organization, must exhibit a sustainable capability to learn and work collectively. It must also manifest a readiness to innovate and adapt to change (Örtenblad, 2018; Sidani, & Reese, 2018).

Data from the study suggested that it was likely that single-loop learning, which is principally concerned with the successful accomplishment of a policy, occurred more frequently than double-loop learning. Double-loop learning is more effective at prompting the deep-rooted changes that involve the modification of an organization's underlying norms to generate positive change. Arygris (1977; 2004) emphasized the need for organizations to explore ways of developing and increasing their capability to apply double-loop learning. For organizations to be both competitive and future-oriented, they must promote both adaptive and generative learning within the framework of organizational learning (Serrat, 2017). More generally, the case organization appeared to pay too little attention to what Kline and Saunders (1993) saw as the second of a two-step change involving ways of learning how to learn in order to develop the capability to generate a regular supply of novel ideas.

In building a culture supportive of organizational learning that many of the participants called for, leaders of the case organization will need to promote and reward qualities such as mutual trust, respect for others, honesty, integrity and openness. Leaders should create a safe environment in which it is not only permissible, but also expected that members will ask critical questions and challenge underlying values, beliefs and mental models and the traditional methods of doing things.

4.1.4 People Empowerment, Incentivization and Motivation

Both structural and cultural factors were seen as being responsible for the curtailment across the organization of employee empowerment. There was a general awareness among interviewees of the need for members to have a greater degree of independence and control in their day-to-day activities, and that this needed to be tied in with reforms in respect of job appraisal and incentivization schemes. Consistent with the findings of Peddler et al., (1991), the case organization's performance appraisal system used for human resource management was geared more to rewards and punitive measures than to learning, development and empowerment. There was some support among respondents for a closer alignment of learning needs with opportunities for greater empowerment and professional development. Low levels of intrinsic motivation due to fewer learning, training and development opportunities will lead to a workforce of time-servers rather than a well-motivated and skilled body of workers, who see their own advancement as intricately tied to that of their organization (Vera & Crossan, 2004; Lee & Welliver, 2018; Chou & Ramser, 2019).

Participants spoke of the need for a greater recognition of the intrinsic and extrinsic drivers of employee motivation in order to generate the best results from training and development opportunities. Some expressed frustration with the apparent unwillingness to make changes to a deeply embedded and unaltered policy on incentives. This was perceived as posing a danger to the organization's capacity for learning, as well as the motivation of its employees. The organization stands to benefit from a more finely grained system of recognition and reward based on performance, qualification and skill-set. This could be woven into the promotion system with additional increments and annual leave as incentives.

The advantages of a strongly motivated workforce who experience job satisfaction are many. Highly motivated workers are likely to be more focused, resulting in a reduction in the number of incidents and hazards, which is a critical consideration in an organization that utilizes highly sophisticated machinery costing considerable amounts of money. Increased levels of motivation are also likely to translate into higher levels of productivity and staff retention while lowering levels of absenteeism. Conversely, low levels of motivation within an organization constitute forces that hamper organizational learning. 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.

Transformational leaders believe in the delegation of responsibility and the empowerment of followers. This produces a workforce that is ultimately more committed, entrepreneurial, and responsible at work, one whose members are more likely to excel in what they do. People with higher levels of personal mastery who work more autonomously also tend to learn faster (Rosenbach, 2018). Critical to a sense of empowerment is a degree of autonomy and the opportunity to contribute to the decision-making process. Making decisions and solving problems are seen as fundamental organizational competencies. Clearly, not all decisions are good ones, and there is a need to encourage decision-making while being tolerant of mistakes. The aim is to expose members to the difficulties of decision-taking so that they can gain experience and learn from their mistakes resulting in better future decision makers. A level of criticality in respect of errors only need apply at times of national crisis. It is during times where peace is the norm that the organization should create simulation activities and learning opportunities that prepare employees of various ranks in the skills of problem-solving and decision-making. It was clear from the comments of a number of the participants that the case organization needs to focus more on training its employees to make sound decisions. A system should be put in place that assiduously promotes critical thinking and problem-solving, and rewards those that use these talents to help the organization to make improvements and overcome challenges.

Both Halachmi (1994) and Bason (2018) point to the vast differences that exist between the corporate and state sectors in terms of incentives offered to employees for innovative and critical thinking and empowerment in the decision-making process. Leaders could look at various incentivization and reward models employed by other organizations and respond to mimetic pressure to change. By narrowing the incentive/reward gap between private and state organizations, the case organization may also find itself in a better position to attract and retain talented individuals, who might otherwise have opted for a high-end job in the corporate world.

4.1.5 Knowledge Management and the Application of Technology

A learning organization can be perceived in terms of the outcomes of processes extending from the acquisition of knowledge to its sharing and interpretation and its storage in organizational memory. Through these processes, a learning organization determines knowledge worthy of storing in organizational memory and integrates it in the organizational business (Huber, 1991; Anderson & Jefferson, 2018). Knowledge management can facilitate and support individual and group and organizational learning when integrated into every operation, mission and business process (Milton & Lambe, 2019). A lack of knowledge management expertise, and the consequent failure to properly integrate knowledge into the day-to-day running of the case organization was acknowledged as a cause of concern by several participants. Knowledge is acquired incrementally over time in many ways, and the case organization needs to demonstrate the value it attaches to the acquisition of knowledge by ensuring that it becomes the property not of individuals, but of the wider organization. Knowledge acquired by individual members, be it from funded courses, symposiums or during operational duties, needs to be shared, used and stored in ways that allow it to be accessed and built on by others. Several participants commented on the need for their organization to better appreciate the immense value of acquired knowledge and to invest in better knowledge management systems. Marquardt (2011) stresses the need to harness the power of technology as becoming a learning organization requires learning processes that are supported by organizational subsystems. All three data sources threw up examples of flaws in a system that is key to consolidating the outcomes of organizational learning and allowing the organization to thrive. The mechanisms used by the case organization for capturing and sharing knowledge were not sufficiently consistent, all-encompassing or rigorous enough to ensure that all important knowledge was systematically sorted, recorded and appropriately stored and institutionalized. Organizational learning outcomes were thus compromised by not becoming properly integrated and institutionalized with the consequence that lessons learnt were not always being built upon. Lessons should not be considered truly learnt until they have been successfully endorsed, implemented and incorporated into the organizational system. A systematic digital back-up of all lessons learnt is critical here so that individuals, particularly those heading sections and branches, are not the sole custodians of vital information.

4.1.6 Culture

Culture, which is primarily determined by values, beliefs and attitudes, is instrumental in defining the quality of accumulated learning, interactions and insights that take place within the organization. A supportive and safe environment, conducive to learning and innovation is contingent on culture, and is seen as an important first step in building a learning organization (Garvin, 1993; Senge, 2014; Hong et al., 2018).

Some participants expressed reservations about the learning environment within the case organization where the culture was deemed to be insufficiently supportive of such vital aspects of learning as listening to a range of views and upholding the right of employees to express their opinions and question the views of others. The culture, while not explicitly suppressing or silencing alternative views, was seen as not actively encouraging the questioning of conventional ways of thinking, acting, and engaging in experimentation. Similarly, not enough was being done to generate a climate in which employees collaborate and learn collectively. A learning organization grows and develops when it promotes an environment that maximizes the potential from ongoing learning and knowledge sharing. Private organizations have an advantage over those in the public sector, since a culture of information sharing is perceived as a means to solving client problems more quickly, leading to enhanced performance, increased sales volume, and more profit (Anthes, 1998; Charles Jr et al., 2017).

The findings from the interviews indicated broad agreement among participants that the leadership of the case organization had not shown sufficient commitment to cultivating an organizational learning culture. According to Watkins and Marsick (1993), leaders must develop a strategy that in turn, creates and supports the learning culture and the structures of the organization. Marsick and Watkins (2003) believe that the right organizational culture, together with the social and physical environment are crucial for sustained organizational learning to take place.

A culture that supports ongoing organizational learning is dedicated to the promotion and reinforcement of learning and seeks to involve the entire workforce in bringing this about. It is a culture that welcomes new ideas, allows risk-taking, is accepting of errors, and ensures that knowledge is valued, shared, and protected throughout the organization. A culture such as this is considered to be one of the solid pillars of an effective learning organization (Kontoghiorghes et al., 2005; Senge, 2014; Senaratne et al., 2019).

A supportive culture is also one in which conventional resistance to change is being defeated, obsolete practices are being discarded, and the status quo is being continuously challenged. With respect to a military organization, it should be possible to create all of the conditions for a sustainable learning organization, where critical and creative thinking lead to experimentation and innovation that serve the organization well in times of peace and war.

Change is hard especially when it comes to culture. The leadership of the case organization will need to think carefully where to begin. Because people's beliefs, values and mental models are a significant determinant of organizational culture affecting behavior and performance, this is where change has to begin. Data from the interviews consistently pointed to the need for a cultural shift in favor of an increased commitment to establishing the conditions supportive of organizational learning. Changes would need to be incremental and gradual to avoid the temptation to make sweeping changes to the existing culture with its embedded belief systems. By focusing on what people are doing well, the leadership is likely to win support for any changes they may wish to introduce. Learning and change are inseparable, and the findings of this study point to a recognition of this by senior officers in the case organization. What needs to be done now is to establish favorable conditions for organizational learning across the organization so that its members will be better prepared to embrace change.

4.1.7 Leadership

Data from all three sources provided ample evidence that the organization's leaders need to familiarize themselves with the concept of a learning organization, understand the value of organizational learning and its potential impact on the future of the organization. More importantly, they need to recognize why it is essential for the organization to realize the importance of becoming a learning organization. In order for the organization to exhibit the beneficial characteristics of a learning organization, its leaders need to fully understand and endorse the process. In the absence of such a commitment, it is not surprising that the culture and fabric of the organization provided space for forces harmful to organizational learning to take hold unopposed.

Organizational behavior will need to change and the initiative for this will need to come from the leadership. Leaders will need to coax and guide members to adopt attitudes more attuned to organizational learning. Leaders will need to adopt a proactive rather than a reactive mindset. Some participants alluded to situations where leaders and managers tended to act as guardians of the status quo, reacting to events after they had occurred instead of anticipating and eradicating problems before they had a chance to do damage. Senge (2014) distinguishes between what he calls "adaptive" and "generative" learning organizations. Adaptive organizations are reactive, and respond the instant problems and challenges emerge, whereas generative organizations are proactive and strive to address the anticipated challenges of the future. Effective transformational leadership is required to establish a culture that embraces change and innovation rather than just adaptation (Nelson, 2017). It is vital for the leaders within the organization to give their absolute backing to the creation of a shared vision and the building of a community of learning marked by a pattern of behavior that motivates and reinforces a strong

sense of collegiality. Leaders need to find ways of establishing a culture where employees have a sense of purpose, a sense of worth, and are stimulated by the various tasks and projects in which they are involved.

Leaders and managers need to implement a system that leverages the learning gains of individuals and groups so that the organization as a whole is the beneficiary. Lessons learnt that become part of the collective knowledge bank, available to the organization as a whole, need to be applied, innovatively, utilized and validated in a continuous recycling process (Marquardt, 2011). Motivation, job satisfaction, a sense of achievement and self-esteem are also important areas that the leadership of the case organization should be concerned about and seek to boost.

The process of leadership is essentially a skill that the organization should aim to instill in all of its members. Learning organizations may be seen as democratizing the decision-making processes and spawning a community of leaders. The interview findings indicated an appreciation of the need for the case organization's leaders to establish a climate that empowers and motivates employees and welcomes their increased participation and contribution. As part of the transformative process towards a more inclusive culture, leaders should focus on building positive mental models (Senge, 2014). It is mental models with their deep-rooted assumptions that govern the way employees visualize and understand their organization, and determine the way they behave, plan, implement and review their actions. It is argued that employees may be largely unacquainted with these mental maps which may lie at a sub-conscious level (Arygris & Schőn, 1974; Sisson & Ryan, 2015). If this is the case, then asking employees to engage in reflective practice and consciously explore their attitudes to specific issues at work, and share their reflections with others, will help to reconstruct cognitive and perceptive maps and form positive mental models. This is an important role for leadership. Effective leadership, supportive environment and concrete learning processes are three building blocks proposed by Garvin et al., (2008) for establishing a learning organization. During the course of the interviews, participants who were themselves part of the leadership structure, alluded to the need to address each of these areas, seen as key to securing and reinforcing learning at individual, team and organizational levels.

In order to develop their organization's learning capability, the senior leadership of the case organization need to examine various learning organization models. They should consider ways of incorporating, within the structure of their organization, such essential elements of organizational learning as a shared vision, personal mastery, mental models, team learning and systems thinking advocated by Senge (2014). The case organization requires a reform-minded brand of transformational leadership who can articulate a clear vision with passion, underpinned by strong values. These leaders would need to promote a people-oriented approach where employees feel that their needs are considered, and more importantly, that they are valued as this instills people with a sense of personal worth (Northouse, 2001; Hawkins, 2017). Transformational leadership, thus, regenerates an organization by creating a shared vision, and investing in the development of all of its members (Sagor, 1992; Ismail, 2018). Transformational leaders are needed in the case organization to motivate their subordinates to accomplish work independently of management, and spark in them an instinctive desire to work towards the public good and to place the interest of the group and the organization beyond narrow personal interests (Bass, 1998; Schuckert et al., 2018).

5. RECOMMENDATIONS

For strategic leaders, theoretical frameworks could offer some guidance on how to create and manage a learning organization. Certain practical features may be extrapolated to help a potential learning organization in the formulation of strategies by identifying the similarities shared by various theoretical frameworks. Additionally, information and conclusions from case studies like this one, as well as those reported in the literature, may provide guidance for an emergent learning organization. The findings of this case study have resulted in the following suggestions for usage in practice:

- In order to properly support a learning organization, the case organization's collective leadership needs to become more familiar with its concept and guiding principles. An organizational learning consultant should be hired to oversee this process. This person will be in charge of influencing people's opinions and outlining the many steps involved in changing the organization.

- The behavioral characteristics that are likely to assist the organization in transforming itself beyond expectation should adhere to a transformational leadership paradigm. Once dedicated to the cause of the learning organization, leaders must demonstrate qualities like those contained in the 4Is (Bass, 1996) to serve as an unstoppable persuasive force to win over subordinates and implement significant change.

- Leaders should work with their members to create a shared vision that serves as the foundation for defining strategic goals. The policies relating to education and training should also clearly support the need for the case organization to reshape itself into a learning organization that is characterized by flexibility and adaptability to changes occurring in the external environment. The vision statement should reflect the centrality of learning as the main driver of progress.

- The military organization's leadership should continue to promote and enhance learning processes with important practical and behavioral outcomes such as the post-flight and after-action reviews. The type of training that encourages reflection, inquiry and dialogue should be applied more widely across the organization because this exemplifies some of the highly prized qualities of an organizational learning culture.

- To ensure that knowledge is shared and organizational learning outcomes are fully incorporated into the organization's strategy, doctrine, policies, training, standard operating procedures (SOPs), and daily operations, a rigorous and comprehensive knowledge management system should be set up and maintained. This should include a thorough assessment and evaluation of the many sub-systems of knowledge management, such as information transfer, knowledge sharing, learning from mistakes, critical thinking, systems thinking, holistic thinking, and innovation.

- The ability of the military organization's leaders to conduct environmental scans and foresee upcoming issues deserves more consideration. Leaders need to increase the organization's capacity to keep track of developments occurring domestically, regionally, and globally. This should allow the organization to innovate, minimize risk, and seize on positive trends that help it better identify, monitor, and analyze external threats and changes.

- The military organization's leadership should establish a center for lessons learned where knowledge gained from prior military experience is carefully managed and disseminated to various departments before being incorporated into military culture, policies, and standard operating procedures, among other things.

6. CONCLUSION

This paper looked at some of the key elements thought to have a depleting influence on the case organization's capacity to generate and institutionalize effective organizational learning, and embark on a path towards becoming a learning organization. The factors discussed included the organization's structure, physical and social environment, the position of its leadership and the impact that the existing culture had on attitudes, behavior, learning capacity and performance.

The findings revealed that most of the leadership were unfamiliar with the concept of a learning organization. Consequently, the gains derived from functioning as a learning organization were not well understood and there was therefore no real incentive to modify the structure and policies in ways consistent with organizational learning. There was no evidence of a shared vision that incorporated the strategic importance of organizational learning, and no reference to a learning organization. The findings pointed to the need for an all-encompassing, well-coordinated and transparent approach to organizational learning that maximizes the learning gains of individuals and groups to the benefit of the organization as a whole. Success in achieving this is dependent on transformational leaders committed to the cause of converting a military organization into a learning organization. Obtaining their unequivocal support represents the first major hurdle on the path to becoming a learning organization. Without the unreserved backing of leaders, barriers to change will continue to exist, and learning will continue to underperform in terms of its potential to transform the organization.

Both the literature and the findings of this study suggest that being a military organization is not incompatible with being a learning organization. Traces of organizational learning that currently exist within the case organization, and are believed to be working well, should not be discarded, but re-evaluated and built upon. Identifying and countering the forces acting against effective organizational learning is half the battle. The other half will be fought putting in place the various enabling factors that will alter the culture and provide the systems that ensure that the organization can begin its transition to a learning organization.

7. LIMITATIONS OF THE STUDY

The case study methodology has some drawbacks, the lack of generalizability being one of the most significant. The limitation to documentation and artifacts that were not subject to stringent security rules was another drawback for this single case study of a military institution. Participants' memories, perceptions, and attitudes were crucial to the conclusions. Additionally, responses from those interviewed would have been subject to potential biases due to their physical, mental, and emotional states at the time of the interview.

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