

# Operational Learning: The New Relevancy For Knowledge Management In The Singapore Armed Forces

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## Abstract:

This paper conceptualises the issues involved and possible enhancements to shift existing systems, processes and practices in order to address operations learning within the Singapore Armed Forces (SAF). It will specifically discuss how the SAF's early investments in knowledge management, leadership development and organisational learning need to come together to harmonise the systems, process and practices in order to to systematise operations learning.

*Keywords: Operations Learning; Knowledge Management; Organisational Learning; Leadership Development; Third Generation SAF*

## INTRODUCTION

Most Knowledge Management (KM) initiatives in organisations do not take off because they are not situated within identified business drivers. The new relevancy for KM in the SAF is in operational learning. One of the identified challenges for the SAF is for Commanders to consciously establish rapid operations learning cycles and to inculcate operational imagination in their decisions and planning processes. At the leader level, operational learning is the capacity to make conscious decisions, arising from the ability to process information and sense make based on data and knowledge. Such decisions combine experience with observations, insights and lessons



*Learning as Individuals and Teams*

learnt within teams. At the system level, operational learning is about integrating lessons learnt into exercises in order to better prepare ourselves. This is the knowledge management problem facing the SAF. To realise operational learning, it is important to shift from a traditional training emphasis to training for operations. This requires training and exercises specifically designed to help us better prepare for operations.

This paper provides a discussion of the issues involved and the possible enhancements to shift existing systems, processes and practices in order to address operational learning. It will specifically discuss how the SAF's early investments in knowledge management, leadership development and organisational learning need to be harmonised to systematise operational learning.

## SHIFTING FRAMES

**From Perceptual to Perpetual.** Change is the new reality for the SAF. The ability to read and respond to changing environments and conditions is now a demand placed on command, leadership and management in the SAF. While our officers intellectually understand the need for change, the dynamic environment requires that we become increasingly comfortable with perpetual change. Here is where the intellectual,

the affective and the emotive need to be better balanced. While we understand the need for change, we might not see it as a fundamental effort requiring a commitment from us in shifting our consciousness to acquiring new skills and adopting new beliefs. To move from merely observing and discussing change, we need to participate and empower change on the ground. We need to move from the individual to the collective. In short, we need to start acting as leaders who steward change. Knowledge creation takes on a whole new meaning when we acknowledge that change drives knowledge, together with the traditional notion of knowledge driving change.

#### **From Surface to Depth.**

The training and education system in Singapore is built on academic excellence that promotes *just-in-time* knowledge. We develop capacities to be able to skim and superficially learn something for the moment, and this *just-in-time* assumption is valid only when knowledge is available. What is increasingly required are skills, actions and habits that enable learning in context, not just for content. Double and even triple loop learning, includes inculcating reflective practices within ourselves and in those whom we lead. Cultivating reflective learning will help Commanders harvest insights, and more importantly, underpin operational learning. Insight is the essence of lessons learnt as individuals, teams and ultimately the SAF.

**From Coping to Adapting.** What we regard as the *fight fire syndrome* is an ad-hoc coping mechanism; we consciously become better at the task as we gain experience. However, we sometimes trivialise issues in order to achieve the desired outcome without attending to the signals along the way that might provide opportunities for greater insight. In the old economy, this was acceptable, given the buffers and checks we could afford at various stages. In the new environment, characterised by complex systems, we are required to acquire a deeper understanding of system dynamics. In order to better manage uncertainties, the SAF training and education approaches must progressively address information processing and sense making skills.

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## **EXISTING SYSTEM APPROACHES**

**Knowledge Management (KM).** We can spend countless hours debating over our knowledge management abilities, the merits of Web 2.0, their perceived distractions and security risks. However, the brutal truth is that we are nowhere nearer to knowledge management in the SAF than we were a decade ago with the virtual registry. If we still cannot find what we are looking for, and cannot identify who-knows-what within our organisation, the problem might not be with knowledge sharing, but with the design and implementation of KM transfer systems, processes and practices in the SAF. Only when we have confidence in a robust KM system will we be able to utilise it to create, transfer and integrate knowledge. The issue with operational learning is not with capturing and storing knowledge—but with creating new knowledge. Such knowledge also resides in the heads of those who experience it on the ground during operations. The ability of our KM systems to support us in knowledge creation, transfer and integration will promote a better attitude towards the management of uncertainties. However, we need to move out of the registry mindset and transfer the responsibility for KM systems design to operational communities, through lessons-learnt frames, and leverage on institutions such as the Army Center for Lessons Learnt (CALL) and SAF Center of Operational Learning (COL).

**Leadership Development (LD).** Military leaders inevitably shape opinions, attitudes, values and ideas in the people they lead. We have made considerable progress in raising the awareness and understanding of the SAF's leaders across all levels of the need to build individual skills such as coaching, facilitation and reflection. These skills enable us to better engage those whom we lead and to perceive issues from their perspective. Through its partnership efforts with the Services, the SAF Center for Leadership Development (CLD) is beginning to grow these skills into sustainable action on the ground. Such “practice fields”

are supported by processes such as the Individual Development Process (IDP) and the Action Learning Process (ALP), which convert skills into practice in training and exercises. When deployed into ops, these skills strengthen insight formulation and generate lessons learnt.<sup>1</sup> These skills form the true bedrock of operational learning.

## *The issue with operational learning is not with capturing and storing knowledge—but with creating new knowledge*

**Organisational Learning (OL).** The SAF has been at Organisational Learning for the last five years. Nominated senior officers are placed in change agent roles in order to foster new approaches to thinking and doing. These programmes have addressed fundamentals such as examining life's purposes, understanding mental models, building personal mastery and seeking system thinking. The programme builds individual capacities and provides a language for bringing about necessary changes for one to lead a life of purpose and significance in the SAF. However, based on anecdotal evidence from several graduates, the demands of the mainstream scuttles all well-intended initiatives that these graduates might deploy on the ground. In its current frame, the OL programme is limited in ground implementability. But it remains promising as a driver for understanding change with the potential to build enduring practices for learning. Hence, the overarching KM system needs to be positioned as an enabler, not as the source or the driver, for such learning to be transformed into knowledge. This means that the system cannot be built without first understanding the needs, styles and knowledge seeking behaviours of different learner groups.

## **SOLUTION SPACES**

**Management of Uncertainties.** The SAF's future leaders are adaptive leaders who are comfortable with complexity and uncertainty. Operational learning and KM should reflect this new mental model. Instead, we are caught today in a reality that often turns into dreary meetings, seeks agendas, minutes and action item tracking. In major exercises, most



*The Adaptive Leader: Psychological Resilience and Self-Confidence when facing uncertainties*

officers routinely engage in ops analysis and churn out numerous drawer plans. Generally, we are trained in risk minimisation. However, in our management of uncertainties, we should cultivate the necessary conditions for decision superiority. We must move our planning approaches away from linear and rationally structured, step-by-step time based iterations, to one that allows intuitively patterned frame-based actions capitalising on insight based information superiority. Operational learning and KM go hand-in-hand to ensure that the future leader is able to be adaptive, and has the requisite openness for deep self reflection.

**Rapid Operational learning Cycles.** We are not alone in the desire to learn rapidly. In the Vietnam War, the Americans realised that learning before, during and after any experience considerably shortened learning-cycles. CLD has started out with the ALP effort to design the Unit Training System (UTS) for learning outcomes in the Army Training Institutes. In the process, CLD and HQ Training and Doctrine Command (TRADOC) are attending to knowledge management at the Battalion level (Battalion KM). Over time, these seed efforts will allow CALL and COL to evolve into important institutions that will be key nodes in the systematisation of operational learning.

**Inculcating Operational Imagination.** This is probably the hardest to do because we train and educate our people to seek Commander guidance (CPG) and plan based on operational analysis and precedence. Therein lies the burgeoning worry: weak situational awareness detection capabilities. The Collective Appreciation of Situation (CAOS), deliberately designed to be logical,

is paradoxically limiting. Operational imagination tends to be subdued by rational objectivity. Such objectivity, while necessary from a time management point of view, is also responsible for goal fixation. In simple terms, we are restricting imagination by our very own processes. We need to attend to building the capacity for insight and apply this to our strategy, which in turn supports operational learning.

## SHIFTING THE SYSTEMS

**Knowledge Management (KM).** As the SAF starts to participate in more operations to gain experience and knowledge, we will need to design systems to support operational learning. This will involve building logic loops for knowledge search and transfer, and a search and retrieval logic based on user requirements rather than the current document-based system. Such a KM system will build confidence in our commanders and war fighting teams. It will also promote operational imagination and innovation in applying lessons learnt to new threat scenarios. If we know what went on before and what was learnt earlier, we will be able to position ourselves to face future challenges. Here there are two real problems on the ground. First, people cannot find what they are looking for, resulting in poor confidence in the current system, and second, our people's hesitance to share their thoughts openly. The second problem is due in part to the acute sense of hierarchy, which must be mitigated if our people are going to learn as individuals and teams. To manage such vertical stresses, there is an increasing need to find a useful way to build, tell, write, use, store and retrieve stories in the form of narrative knowledge. Such a KM system allows managing uncertainty to be accepted as a form of managing by discovery, akin to our "Google" experience. This experience needs to be based and built on operational learning logic loops that push and pull between lessons learnt, disseminate into curriculum and doctrine, and are supported by technology for better accessibility. This considerably shortens the learning loop and seeds the senior leader capacity for strategy formulation based on operational learning. As we mature in these efforts, we should develop narrative databases from which we can pattern references for strategy formulation.

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**Leadership Development (LD).** CLD is now at a stage where ground implementation requires clear partnering efforts in process design and continued system support for basic skill building, especially in reflective practice. There will be continued efforts to balance research with implementation—but the point of the matter is that the skills such as coaching, facilitation and reflection require specifically designed processes, such as the Individual Development Process (IDP), Action Learning Process (ALP) and Competency Based Learning (CBL), which in turn must sit within the larger mainstream entities such as Human Resource (HR), Operations and Training systems respectively. When we manage to do this, we arrive at practice fields, which includes habit forming actions. In the years ahead, CLD will be able to shift into a more mature frame of providing systematic feedback and assessment of effort to management on behavioural trends. In the larger scheme of things, the SAF Battle Planning Process should be reviewed to better accommodate operational imagination. Some of the conceptual models earlier experimented by Future Systems Directorate (FSD) (sense making), Joint Operations Department (JOD) (Effects Based Operations) and Training and Doctrine Command (TRADOC) (System Reframing) could provide input for an effective review effort. CLD has just completed an in-depth study on what would be required to build adaptive leaders. Some of these constructs provide useful input for the review ahead.



*Exercise Forging Sabre*

**Organisational Learning (OL).** Senior Officers who have had the benefit of attending previous programmes provide a critical mass with the capacity to bring about change in beliefs and attitudes. These officers should be stewarded at the SAF level through CLD as an extended network that will build awareness and understanding towards change, through the continued application of Organisational Learning (OL) tools and frameworks. The Joint Training Hub should leverage on this group of Senior Officers, while the current programme should extend to Warrant Officers and Senior MDES, allowing further contextualisation to be applied. This network of change agents should be supported by a web-based training and education system that will house OL tools and frameworks, enabling graduates with ready access to resource packages. CLD's development of the 31 LD and 24 OL packages on the LEARNET are a good start. However the effort must not just center on promoting tools and frameworks. It should instead use these tools and frameworks as a means to build stronger belief systems, self-awareness, self-management, and personal mastery. Doing this will take us several steps closer to building psychological resilience and self-confidence when facing uncertainties.

## CONCLUSION

Clearly, the more fundamental aspects of the transformation that the SAF requires are only starting to emerge. When we manage to address these issues on the ground, we will be in a more confident position to manage uncertainties, inculcate operational imagination and build capacities for rapid operational learning. This will require us to harmonise knowledge management, leadership development

and organisational learning to arrive at training for operations, thus allowing us to promote operational learning across all levels in the Third Generation SAF. 🌐

## ENDNOTES

1. The phrase "Practice Fields" is coined by Peter Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (NY: Currency/Doubleday, 1990) and *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization* (NY: Currency/Doubleday, 1994).



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