



SAF Transformation – Focusing on the People

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Abstract:

The Singapore Armed Forces (SAF) is moving towards Third Generation warfighting forces, but it is also important to focus on the people aspect of the transformation. This article deals with both managing change and creating the capacity to change in an organization. Exploring both the need for different change management approaches and the impediments to internalizing systems thinking in an organization, the article links the various concepts into a transformation framework useful for the SAF.

Keywords: Force Transformation; Organizational Learning; Systems Thinking; Third Generation SAF

INTRODUCTION

The Singapore Armed Forces (SAF) has embarked on the transformation journey towards Third Generation warfighting forces that involves SAF's processes, structures and weapon systems. History has shown that human capital is either the ingredient for success or stumbling block of organizational transformation. Therefore, while SAF is looking into reorganizing its warfighting forces, it is also important to focus on the people aspect of the transformation.

This article will focus on two areas: change management and creation of the capacity to change. It will propose concepts for these two areas to address the likely transformation pitfalls commonly caused by people. Finally, it will link the various concepts into a transformation framework that will be useful for the SAF. The essay will first elaborate on the driving forces behind transformation in SAF.

DRIVING FORCES OF TRANSFORMATION

The SAF is transforming to cope with new threats and tap the opportunities of the



An SAF medical team member applying a cast on a boy with help from a Dutch health care assistant

multifaceted, changing environment in the 21st century. The three main thrusts behind the SAF's transformation are the expanding spectrum of operation, rapid advancement in technology and resource limitations.

The first main thrust of the SAF's transformation deals with the expanding spectrum of operations. The SAF has built up a credible defense force against conventional threats over the past 35 years. However, the new geostrategic situation has expanded the SAF's roles and responsibilities.



The 11 September 2001 (9/11) terrorist attacks have changed the security landscape of the world drastically. The SAF must reorganize and build new capabilities to deal with threats from non-state actors. In addition, its involvement in Operations Other Than War (OOTW) such as Peace Support Operations (PSO) and Humanitarian Aid Disaster Relief (HADR) has increased over the recent years.

Rapid technological advancements, especially in computing power have transformed the business world from industrial age to information age. The last ten years have seen the Internet revolution leading to the current era of globalization. The SAF has also tapped on the benefits of the reduced cost in Information Communicating Technology (ICT) by initiating Integrated Knowledge Based Command and Control (IKC2) to network and increase the sensemaking capabilities of its combat forces.

People are the main factor in determining the success of organizational transformation and they can be categorized into a few categories that require different change management approaches.

The last driving force for the transformation is limited resources in terms of budget and human capital. Singapore's economy is maturing, with slower GDP growth: the SAF has faced defense budget constraints previously and will again eventually. On the other hand, weapon system costs are increasing rapidly. In tandem with the slower economic growth, Singapore's demographics are also changing due to the low fertility rates over the years.¹ In one or two decades, the number of young Singaporeans

joining the work force will shrink. Hence, the SAF will have to continue to explore innovative ways to reduce its reliance on manpower.

What Should Not Change

Although organizational transformation is a large-scale change that affects organization strategy as a whole, it is important for the organization to recognize what underlying fundamentals should not change. Goodstein and Burke suggest that for transformation to be successful, an organization needs to identify and retain certain fundamentals.² Management should reinforce unchanged fundamentals and communicate them to the workers so that they will not be lost in the process of transformation. Unchanged underlying fundamentals have provided the background in forming the proposed Transformation Framework shown in Annex A.

MANAGING CHANGE – COLLECTIVE INDIVIDUALS CHANGE (CIC)

Black and Gregersen suggest that lasting success in transformation lies in changing individuals first—organizational transformation will follow. An organization changes only as far or fast as its collective individuals change.³ They argue that in order to achieve transformation success, an organization should focus on changing every individual in the organization. This concept is ideal but impractical as the different individuals come with different characteristics and it will be too big a burden for a large organization such as the SAF. However, instead of changing every individual in the organization, this essay redefines Collective Individuals Change (CIC) as formulating different change strategies to tackle the change resistance of different categories of people in an organization. The CIC concept converts people from hurdles to drivers of transformation.

CIC is anchored on the principle that people are the main factor in determining the success of organizational transformation and they can be categorized into a few categories that require different change management approaches. CIC groups the people that wear similar colored “lenses,” although their lenses may differ in intensity and shade. The color of people’s lenses refers to their education, work scope, training, roles and responsibilities in the organization. Each category of people exhibits unique culture, social circle and mental models. By understanding their culture and mental models, an effective change management approach can then be implemented to help this category support each other and change collectively.

In the SAF, the CIC concept should be applied from junior to senior management—from Warrant Officers to Senior Officers. CIC does not target the specialist group but the supervisors instead—it will buy-in the supervisors towards transformation and they will then influence and lead the specialists towards transformation.

Although the subsequent sections split the CIC discussion based on the categorization of people in terms of different management level in SAF, it is important to highlight that the concept can

also be applied by re-categorizing the people in terms of their vocation or unit.

Warrant Officers – The Engine that Provides Thrust

The Warrant Officer (WO) group has the longest career life in SAF and their technical expertise, experience, culture and mindset have the highest inertia against transformation. A specialist that joins with a diploma qualification will attain the rank of WO at an average age of 35, which will give him another 20 years in the SAF before retirement. They will also stay in a unit for a much longer period of time, as compared to an officer who will normally stay in one appointment for two to three years. The WO’s social network has therefore been around for a much longer period of time as compared to those of the officer. Being both the leader and role model of the junior specialist, WOs have great influence on their development. Senior WOs also play a part in the early years of officer development, when the officer usually taps on their knowledge. WOs can be likened to an engine, a fundamental component of aircraft design since the Wright Brothers first flew. Engine technology has changed over the years in order to provide more thrust to overcome a higher inertia

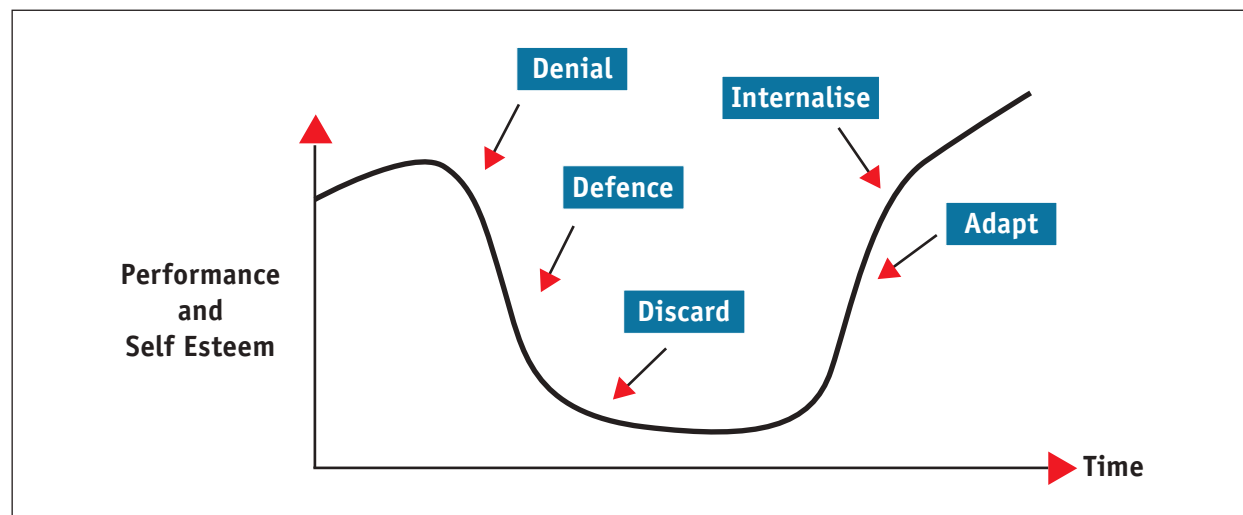


Figure 1: The U-Loop (Five Stages of Change)



of heavier aircraft and the demand for increased airspeed. If the WOs do not see the need to change or buy-in to the changes, it will be difficult to overcome their entrenched mindset.

In order to facilitate the WOs in mastering change, their immediate supervisors and senior management should understand the U-loop response to change suggested by Mick Copper.⁴ The U-loop curve represents the people performance and self esteem versus time at five different stages of change. The WO's supervisor has to help the WO move forward and away from the denial and discard stage of the U-loop. If the WO cannot get past the two stages, he will become the attenuator of the transformation process, and with his influence on the specialist and junior officer, they too will impede the transformation significantly.

With the understanding of the WO's strong mindset and social network coupled with his reluctance in moving out of the comfort zone, the "Change Agent Converter" is added to the transformation framework in Annex A. The Change Agent Converter signifies the importance of converting the WOs into change agents.

Officers – The Aerodynamic Airframe and Structure that Provide Lift

The officers group excluding the senior officers (LTC and above) are least resistant to change and transformation since they are generally the "new blood" in the system. This group of people are usually highly educated, with the majority of them having at least a bachelor's degree. They are professionals that the senior management can rely on to create new "out of the box" ideas and fit in well as the change agents of transformation. Officers are everywhere in the organization,

brimming with intense energy, confidence and willingness to keep pushing new frontiers, just like the aerodynamic airframe which provides lift and also gives the aircraft a striking appearance.

Are there then any concerns about the officers with regards to transformation? The first main concerns for the change management of the officers group is their overzealousness. The officers are relatively new to the system and are eager to prove their abilities. Coupled with their lack of experience, officers can introduce initiatives that are counterproductive. Due to their lack of experience, they may think that an infeasible idea is workable. This causes wastage of resources and creates disillusion towards transformation among their subordinates. The senior officers have to keep this in check by using coaching skills to inquire about any officer's ideas and help him clarify his thoughts. On the other hand, the officers themselves should recognize their lack of experience and be receptive to advice from their WOs and senior officers before implementing a new idea.

The second concern for the officers group is their difficulty in drawing the correct lessons from their experiences. Chris Argyris has coined the term single loop and double loop learning to describe this particular learning behavior.⁵ He gave a simple analogy: a thermostat that automatically switches on the heat whenever the temperature in a room drops below a 68 degrees is single-loop learning. For double-loop learning, we would require a thermostat that could ask, "Why am I at 68 degrees?" and then explore whether or not some other temperature might more economically achieve the goal of heating the room. Officers have been successful in their lives,

With budget constraints and logistical challenges, doing more with less is a fact of life.



especially in acquiring academic credentials, and they have full confidence in their problem-solving capabilities. Because they rarely fail, they may never have mastered learning from failure.⁶ Whenever problems surface in the workplace, this group of people usually look outward at external factors—they rarely look inwards and reflect critically on whether their own behavior could have contributed to the cause of the problem. More often than not, young officers who are out to prove their capabilities fall into defensive mode when issues are raised and usually refuse to go into second loop learning. Officers have to build their self-awareness as part of the Leadership Competencies Model (LCM). They need to go into second loop learning through self awareness and be mindful that the way they define and solve problems can be a source of problems in its own right.

In the transformation framework in Annex A, a “Single Loop to Double Loop Learning Transducer” is used to highlight this learning issue among the officers group and how they can be overcome by adapting double loop learning. The senior officers also need to use their coaching skills to guide and manage the overzealousness of the officers under their charge.

Senior Management (Senior Officers and Commanders) – The Autopilot and Navigation Systems that Provide Direction

It may sound strange that senior management is listed as one of the categories that may impede transformation. Being at the top level in an organization, especially in a hierarchical and authoritative one, they have a lot of power and influence in the organization. The senior management can be likened to the autopilot and navigation systems that guides an aircraft to its destination—erroneous signals from either system will cause the aircraft to fly off course.

Senior management is transforming the organization into something so fundamentally different that there will be stark contrasts between current culture and the new. They will need to suppress instincts honed under the old paradigm, otherwise they risk contradicting themselves in espousing the new paradigm; for example, top down (old instinct) vs. empowerment (new culture) and functional (old specialist organization) vs. task (new multifunctional organization). An “Old Paradigm Instinct Suppressor” is added to the transformation framework in Annex A to remind senior management to be conscious of it during decision making.

CREATING THE CAPACITIES TO CHANGE (C2C)

The increased complexity, requirements and systems in the modern multi-role fighter jet would not be possible without the use of core processors, common communicating protocols and multiplex buses to integrate all subsystems. This avionics design concept allows the sharing and optimizing of resources (software capacity and physical real estate) onboard the aircraft to create extra capacity. The SAF is similarly facing increasing requirements and complexities that dwell in the unknown unknowns of the cognitive realm. With budget constraints and logistical challenges, doing more with less is a fact of life. SAF units have to reorganize their processes and structures to synergize not just within units but also with the organization as a whole. How do we emulate the fighter jet avionics design concept that integrates all subsystems into a coherent whole? The key concept is Systems Thinking, the fifth discipline as suggested by Peter Senge. This concept is not new and the SAF has made significant efforts to disseminate systems thinking via numerous Route-of-Advancement courses. Despite this, most SAF personnel have not internalized the concept. There are still many reactive and short-term solutions targeted at symptoms rather than root causes of problems.



People are still reacting to events (tip of the iceberg) but fail to look at patterns and system structures.⁷ System thinking tools such as the Behavior Over Time Diagram, Causal Loop Diagram and Systems Archetype will help managers look at problems holistically in order to determine solutions targeted at system structures rather than events. The following section does not intend to discuss those tools. Instead, it will discuss the impediments to systems thinking in the SAF and suggest what can be done to overcome them.

IMPEDIMENTS TO SYSTEMS THINKING

The Myths of Commanders

All too often, commanders are protective of their turf and defensive against anything that makes their unit look bad. They tend to only look for indications that reflect well on their unit and believe that they have a cohesive team. This is against the logic of system thinking and it will influence the behaviors of the unit as a whole.

Due to human nature, commanders tend to defend their views and maintain their positions in both internal and external issues. In most meetings, we engage in discussions where we see ourselves as separate entities from one another. We take opposing positions to advance arguments and defend our stakes. Discussions tend to decompose issues and attend only to known parts of the problem. They focus on closure and produce solutions that may not touch underlying issues. Such methods of communication between commanders are not productive and will influence people in the unit to behave likewise. Dr William Isaacs suggests that we should instead focus on having dialogues that do not take sides but focus on the center. A dialogue should seek to harness the collective intelligence of everybody present—together we are more aware and perceptive than on our own.⁸ A generative dialogue will illuminate unprecedented possibilities and new

insights, resulting in a collective flow of ideas and a holistic approach.⁹

Difficulty of Learning from Experience

Peter Senge writes that while humans learn best from experience, we frequently do not directly face the consequences of important decisions. Critical decisions can have wide ranging consequences that stretch over years, but the limited memories of people will not be able to connect a decision with consequences that surface years later.¹⁰ In the SAF, it is made worse with short officer appointments. This impedes learning from experience for both individuals and the organization as a whole—it gives wrong short-term indications that a particular solution is working and conceals long term negative effects.

The issue is not about learning from experience but learning the right lessons.

The issue is not about learning from experience but learning the right lessons. Firstly, we have to emphasize the importance of After-Action-Reviews (AAR) and Post Implementation Reviews (PIR). We generally spend much more time planning for an exercise or initiative than on AAR or PIR. Secondly and more importantly, we should setup a robust knowledge management system to capture all initiatives, including their objectives, expected results and implementation reviews. The database of each initiative will be a live document and reviewed periodically for input on any additional effects or benefits of the initiative. The knowledge management system allows the officer to track the outcome of his initiatives for a longer period of time, even after he leaves the unit, and serves as a platform that allows officers to cross share or learn.

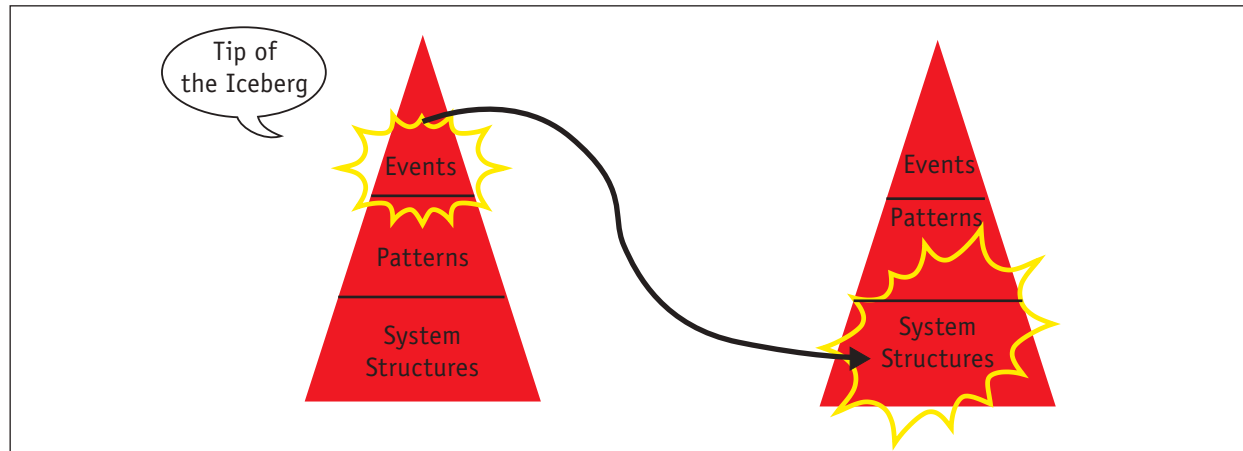


Figure 2: Understanding System Structures through System Thinking

Ending the Conflict Between Work and Family

"Today, finding balance between work and family is cited as a number one priority by more attendees than any other single issue."

– Peter Senge¹¹

The artificial boundary between work and family is anathema to system thinking.¹² Many of us believe we can separate our work and family life but issues in one area influence the other. We therefore have to consider work and family as a whole and not as separate entities.

In order to end the conflict between work and family, there are two key steps that commanders and supervisors can follow: commit to family life and encourage building of family communities. In committing to family life, commanders should wholeheartedly support their personnel in focusing on their families, perhaps granting them compassionate time off during family crises. This will result in a more committed workforce.

Building family communities will create family support groups that provide support to families of servicemen who have to continuously work long hours during times of crisis or those that are deployed for peacekeeping and humanitarian

aid operations that involve high risk. For most units, the only family-oriented event is the annual family day, which is clearly inadequate for building family communities. There are many other events that should involve families: promotion dinners (our spouses do contribute to our promotion), visits to adopted organizations (a good learning opportunities for our children), holiday gatherings and so on. On top of the benefit of promoting bonding among families, servicemen get to spend time with their families instead of treating the occasion as another work commitment.

This section has discussed the final segment in the transformation framework (Annex A), C2C, and proposed three components that could help overcome the impediments of system thinking: "Discussion vs. Dialogue," "Knowledge Management" and "Family Communities." Internalizing systems thinking is the key step to creating the C2C.

TRANSFORMATION FRAMEWORK FOCUSING ON THE PEOPLE

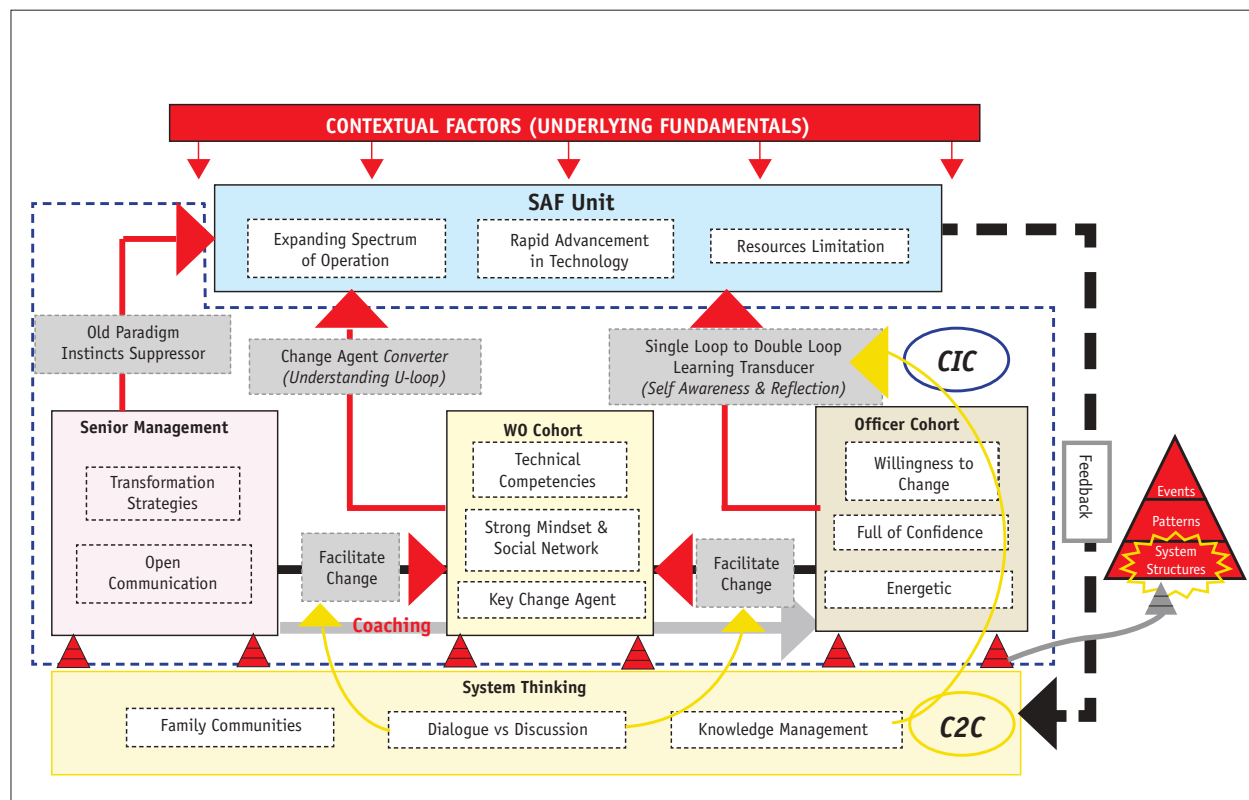
The transformation framework (Annex A) that encompasses both the CIC and C2C concepts is generic and can be applied to all SAF units. However, before applying the framework, SAF

units will have to contextualize the driving forces of transformation in their unit and identify the underlying fundamentals that do not change during the transformation. It allows the people in the unit to clarify and understand the reasons behind the transformation.

The CIC segment in the transformation framework addresses the different categories of people in the units that have different perspectives and play different roles in the transformation process. CIC identifies three categories of people: WOs, officers and senior management. The WO group must go through a “Change Agent Converter” and their superiors have to understand that WOs have the strongest mindset to overcome and help them to move quickly to the internalize stage of the U-Loop. Both the officers and senior management groups can facilitate WO change.

Officers have to build-up their self-awareness and use the “Single Loop to Double Learning Transducer” to change the way they diagnose a problem by looking at both internal and external factors. Knowledge management proposed under C2C can facilitate efforts by the officers to track their previous initiatives and learn the correct lessons. Lastly, senior management must use the “Old Paradigm Instinct Suppressor” to reduce confusion and doubt in their people by having open dialogues (C2C component) to clarify decisions that contradict the transformation objectives.

The C2C segment in the transformation framework is anchored on the principles of systems thinking. It emphasizes the importance of systems thinking and elaborates on the impediments to implementing it in SAF units. Three components are proposed under C2C to



Annex A: Transformation Framework



tackle those impediments, namely, “Discussion versus Dialogue,” “Knowledge Management” and “Family Communities.” C2C supports CIC: by helping people overcome the impediments to system thinking, it helps them identify the underlying system structures rather than merely reacting to events.

CONCLUSION

Overcoming resistance to change is like a fighter jet breaking the sound barrier, requiring proper thrust, lift and navigation systems. In the SAF, WOs are the engine providing the thrust and officers are the aerodynamic airframe that provides the lift. Lastly, the senior officers are the pathfinders that provide the guidance towards transformation. WOs, officers and senior management are different categories of people with different perspectives and roles in the transformation process. The central idea behind the concept of CIC requires the organization to recognize the different categories of people and to utilize the appropriate change strategy for each category.

Modern fighter jet design integrates all subsystems on the aircraft to provide additional functionality and increased capabilities. Similarly, the SAF must recognize the impediments to system thinking in order to create the capacity to change.

In this SAF transformation journey it is not the concept, technology or structures, but the people that will determine success or failure. 🌐

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ENDNOTES

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