A Vision For Our Time

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about the authors

Choy Dawen is a Weapons Systems Officer (C3) by vocation. He is currently working on force transformation at the Joint Staff and normally uses his left brain more than his right brain. For this project, however, he has discovered that what separates a career from a job are compelling organisational values which give meaning to the work we do everyday. He has also learnt that tea breaks and mess functions are a good time for organisational learning, group bonding, and cultural indoctrination. Curiously, though, after all the visioning exercises he underwent, he has also begun seeing half-full glasses and three-legged stools everywhere. Once he has recovered from these strange symptoms, you can write to him at dawen_c@yahoo.com and ask him about the six hats on his desk and the ladder in his cupboard.

Foo Chun Fai is an Air Engineering Officer by vocation. He is currently serving a staff tour in Air Logistics Department. As a self-professed hard-core engineer, he used to believe that everything in the world can be simplified into an equation that can fit into the pocket ... at least that was until he started working in the Air Force, where he worked hand in hand with people of vastly different backgrounds. Chun Fai believes that human resource is the key to shaping the organisation. If the collective brilliance of all men and women can be properly harnessed, the sky will really be the limit for the Air Force.

Goh Meng Kiat is a Weapons Systems Officer (ADA) by vocation. The highlights of his military career include role-playing as PM Goh at the 2002 NDP Preview and participating in the Mistral Live-firing in South Africa. Currently, he is serving as a staff officer in Joint Manpower Department. Meng Kiat wishes to emphasise that this monograph solely reflects the personal views of the authors and challenges the readers to interpret their own Air Force 21 (AF21) vision. When he is not mulling over the AF21 vision, Meng Kiat enjoys swimming, watching basketball and soccer matches from the comforts of his home. He will admit that he is a Liverpool supporter only when they are winning...

Ho Yung Peng is an A4 Pilot by vocation. He is now serving his staff tour in Air Operations Department. Previously sceptical of the AF21 initiative, Yung Peng has since been converted whilst working on the monograph. He now believes that AF21 is an important initiative to guide the RSAF through times of increasing changes and uncertainty brought about by the global security climate as well as the RSAF's Transformation efforts. He hopes that the thoughts and views in this monograph will set the rest of the cynics thinking about the human element of Transformation which will form the foundation for the RSAF's desire to become a "World Class People, First Class Air Force", and hopefully to convert them as well...

Mark Kang is a Weapons Systems Officer (ADA) by vocation and was part of the AF21 Secretariat having been intimately involved in its development since its inception in 1999. He feels privileged to have been part of the team that contributed to the visioning process. It is not everyday that you get to help develop a corporate vision! He believes that a good vision is well worth pursuing and investing in as it ensures that its people can continue to innovate and meet the challenges of future. Mark is currently pursuing his vision of attaining a Masters degree at Nanyang Technological University (NTU).

Poh Li San is a Super Puma Pilot by vocation. Memorable highlights in her military flying career include a Search and Rescue operation out at sea and participation in the 2002 NDP Flypast. Currently, Li San is serving her staff tour in the Future Systems Directorate. When it comes to building an organisational culture, Li San believes in the 3 R's - Roles, Rights and Responsibilities. Every individual in the Air Force holds a stake in the future of the organisation and plays a part in shaping the culture. Her greatest passions in life are adventure travelling and running marathons. The former exposes her to the harsh realities of life while the latter pushes her to the limits of her physical and mental endurance. Her personal vision is to run an ultra-marathon in the world's most remote but pristinely beautiful Mongolian steppes or the Tibetan highlands. Of course, some people think she is a masochist whereas others think she is just nuts...

Joseph Tan is a Weapons Systems Officer (ADA) by vocation. As a branch head in Air Plans Department, Joseph admits that he does not get a lot of kick out of being the RSAF establishment-tax-collector. He finds more meaning in his RSAF Workplan Secretariat role like stressing out workplan script-writers with crazy deadlines. He also imposes a check-in, check-out format using a talking-squeegee-stress-ball in his branch meetings with his staff every Monday. Joseph's philosophy in life is that Passion and Attitude comes before everything else and that there is little that one cannot accomplish with Passion and the right Attitude. Passion is the fire that makes you want to do something with all your heart ... Attitude will keep that fire burning when you hit the speed-bumps.

contents

foreword

Let me begin with the story of the Mustang that I have shared with some of you during the Vision Seminar. Roaming wild and free, the Mustangs were a special breed of horses that were strong in physique and brave in character. However, as they took risks to explore new grounds, many either got injured or perished in their adventurous pursuits. That was akin to the RSAF in the 80s when we were plagued by a spate of accidents. In order to mitigate the risks, fences and paddocks were built in the prairies to protect the new generation of Mustangs, so much so that having grown up within these confines, the young Mustangs never developed the courage and spirit of adventurism their predecessors possessed. Similarly, in the 90s, a lot of procedures and processes were instituted as part of risk management in our RSAF Safety Culture. However, in the past 3 - 4 years, even as more "fences" were knocked down in the RSAF, our young Mustangs are still running within the perimeter of the innermost fence and have not even explored going into the next layer of fences. Is the RSAF today operating within too many self-imposed constraints, that we are trading off our potential capability to scale greater heights?

This anecdote aptly illustrates the change in the organisational culture of the RSAF over the last 35 years. Indeed, as a young Air Force, we have undergone accelerated growth to achieve a respectable international standing today. In most aspects, our diligence and systemic approach have positioned us as a premier Air Force in this region. However, amidst rapid changes in the security environment and technological opportunities, the same processes, systems and structures established in the RSAF today cannot guarantee success tomorrow. The mental models of yesteryears must be constantly challenged to prove their relevance in the world of tomorrow. Although the future is full of uncertainties, a clear vision is still imperative, in order for our people to focus collective efforts and apply innovative as well as effective methodologies to build upon our successes. Our people cannot afford to stay within our own comfort zones and end up like the new generation of Mustangs, well and pure-bred racehorses who only race within limited confines. We must

constantly critique and reinvent ourselves in order to bring us to where we want to be - an organisation of World Class People, First Class Air Force.

Alongside the build up of military capabilities over the last three decades, a distinctly unique RSAF culture has also taken form. However, portions of legacy inherited from the earlier generations may sometimes become stumbling blocks to progress. The future of the RSAF belongs to the third generation's people who are in their thirties and twenties now. As leaders of tomorrow, they will have to start thinking today about the future they envision and to shape the culture they desire. Being born and raised in a different environment, people from younger generations may have significant differences in their experiences, values and aspirations. Some sacred cows today may need to be slaughtered tomorrow because their existence has become irrelevant. Perhaps one may call this divergence in thinking a "generation gap", but really, the existence of this creative tension is necessary for the RSAF to transform.

Seven young officers came together to partake in the visioning process for the RSAF. After many rounds of dialogue and contemplation, these officers of various vocations brought together, in this monograph, their divergent opinions viewed through the lens of the third generation. In an endeavour to highlight the potential areas for improvements, they have deliberately scrutinised the existing imperfections in a critical manner. The purpose of this monograph not only serves to reflect the collective aspirations of our future stakeholders but more importantly, to provoke thinking and generative discussions amongst our people today.

Therefore, I encourage all to read and critique the views in this monograph, from the first page to the last, with an open mind and offer your alternative opinion to challenge the authors. For it is the process of exploratory thinking for new visions and ideas that will benefit one most; which I believe, these seven officers would have already benefited tremendously from.

MG Lim Kim Choon
Chief of Air Force

introduction

Who are we? What do we want to become? Where do we want to go?

For many of us, so caught up in the daily grind of work, these are some of the questions that we have little time to spare a thought for. More often, the pressure of deadlines finds us focusing on how to do something, rather than why we do it in the first place. We are so keen on accomplishments, that we occasionally forget the reason we accomplish.

When we were a young organisation, such single-minded dedication to achievement was certainly crucial towards building up the Air Force. The path ahead was clear enough: we had to build a competent Air Force to defend our country from air attack, while also retaining a strike capability that could deter would-be attackers. From these unambiguous objectives flowed our build-up plan - acquiring advanced technology, developing comprehensive capabilities in all aspects of air operations, and training our operators to attain world-class standards. After 35 years of hard work, we can be proud of our achievements. Our Air Force is widely acknowledged as one of the region's best, and we have earned the right to play alongside the big boys in major multilateral air exercises such as Red Flag.

But where do we go from here?

Now that we have "arrived", what next?

Some would say that it is already a difficult task maintaining our current standards. Like running on a treadmill, we have to keep perfecting our skills and rejuvenating our capabilities just in order to retain our edge. And this is certainly truer than before, since the events of September 11 reminded the world that no one, not even the US, can slip into complacency. We must continue to focus a large part of our organisation's energies on remaining ahead.

And yet, even as our timetable remains full, our souls have become increasingly empty. Maintenance and preservation are motivations that will

never burn as fierily as the desire to rise to the fore. Nobody runs a marathon on a treadmill, because the feeling of staying still - of just maintaining the status quo - dulls the senses and douses the passion for achievement.

Those lucky enough to have been part of the go-getting build-up remember a time when excitement pervaded the Air Force, when everything was new and open to exploration. Pioneers were sent overseas for training, bringing back knowledge that formed the foundation of our operations. New equipment was acquired, which vastly out-performed the hand-me-downs from the British. New records were set; old ones broken.

Today, however, uncertainty pervades. Whatever happened to the sense of exploration? Is it the fault of the new generation who, perhaps pampered by only having experienced good times, are no longer as passionate as the pioneers? But if this is true, how then can you explain the enthusiasm and keen sense of duty that was evident when the RSAF confronted the challenges of a new security environment? And it certainly cannot be that the older generation are resistant to change and thwarting the RSAF's transformation efforts, for they were the same pioneers who rode the waves of change to make the RSAF the much-respected Air Force it is today.

Or, perhaps, what is really happening is that we are experiencing the angst of transiting from one stage of development to the next. Having conquered the frontiers of technology and skill, we must now move on to the new frontiers of the soul and the mind. To continue to grow, the RSAF must learn not only to harness knowledge and technology, but also to instil passion and commitment in its people. And to do that, it must offer a compelling vision of what it wants to be, where it wants to go, and how it wants its people to help achieve that goal.

So what is that vision? This monograph, written by a group of us from the third generation of the RSAF, might hopefully provide some clues.

In the pages that follow, we describe our aspirations, values and the way we view Air Force Transformation. In painting a desired future, whilst remaining cognisant of the realities in societal norms today, we hope to explore the deep-seated mental models and mindsets that shape our day-to-day lives, with the belief that deep change occurs only when our mental models are reviewed and modified as required.

Do we have what it takes?

I am a controller in a command and control squadron in the RSAF. Besides controlling and managing fighters on their peacetime training everyday, the squadron also maintains a round-the-clock watch over our surrounding airspace for possible air threats and responds with the air defence alert units in case of any contingency.

Prior to the events of September 11, our jobs, while real and onerous, for even peacetime flying is fraught with challenges and risks, never seemed to carry the kind of national significance that one sees on TV or reads about in the newspapers. Sure, our work was important, for we managed the chaos and complexity of daily air operations within Singapore's tight airspace. We were also one of the few units in the whole RSAF to maintain a standing 24/7 readiness.

But since the RSAF has never gone to war, nor even mounted significant large-scale operations (except the odd rescue operation now and then), we could never quite convince ourselves that we were contributing to national security.

In that kind of 'threat-free' environment, where each day passed like any other, the petty concerns of daily work asserted themselves. Our 24/7 responsibility, a task which calls for much personal sacrifice as weekends and weeknights are sometimes spent in the squadron rather than at home with family, generated much griping as people complained about the number of public holiday duties they had to do. Invariably, it always seems as if you are doing more than your fair share compared to everyone else. At other times, people would complain about the poor work environment, for the place we worked in was cold and a long walk away from the cookhouse. Thanks to the staccato nature of daily air operations, sometimes there is even no chance to go for lunch.

September 11 changed all that. One could perhaps even say that it robbed us of our youthful innocence, borne of never having witnessed personally the conflicts and dangers of Singapore's early founding years. Anyhow, on the morning of September 12, we came to work confronting a different security environment. Where we once simply ignored all civil traffic in the air and looked out only for conventional military aircraft, after post-September 11 we had to pay careful attention to civil liners to

make sure they were adhering to their planned and proper flight routes. Where we once learnt about hijack response procedures only in theory and hardly practised them "live", we were soon planning and conducting new counter-hijack exercises at least several times a week with real flying aircraft.

More importantly, the gravity of the new security situation made us realise that our petty concerns were indeed, well, petty concerns. And the effect of this realisation on the people in the squadron was nothing short of amazing. People stopped complaining about the long hours and wasted weekends; in fact, many willingly put in extra hours and stayed overnight in order to work on new response plans for the post-September 11 environment. Shortly thereafter, during the Asian Aerospace Show in February 2002, the squadron even went into semi-wartime manning for the first time in many years, so as to maintain a vigilant posture during that high-profile event.

Everyone was divided into two 12-hour shifts and we maintained this alert state for more than a week. But nobody complained, because we knew we were doing this for the sake of national security. There was a sense of higher purpose in what we were doing, a sense that our years of training were finally paying off in making a real contribution towards our nation.

But that short episode has given me confidence that our people can rise up to the occasion. Despite our generation's youth, innocence and lack of personal familiarity with hardship which our elders have, I believe we possess the will to fight when we are called upon. Of all the nine RSAF core values, loyalty to country is the one least talked about and perhaps least understood as well. It probably is not about rah-rah demonstrations of 'duty, honour, country', for such is human nature to complain about petty concerns in the absence of a higher calling. Rather, loyalty to country should be about rising to the occasion and stepping forward to be counted when the nation needs it most, about making a difference when you are called upon to defend your home, your family and your country.

We woke up on September 12 to a new world, but the transformation I have witnessed in my squadron gives me confidence that the RSAF can face the future confidently.

what are we today

"Our future is full of promise, but we must be prepared for the unexpected. In a globalised world, we must re-think our assumptions, take bold and fresh approaches and adapt nimbly to changing conditions."

**Prime Minister Lee Hsien Loong
at his Swearing-In Ceremony, 12 August 2004**

The RSAF is a societal microcosm of Singapore. Like Singapore, the RSAF was borne out of desperation when the British forces withdrew and we were forced to quickly build up our capabilities practically from scratch. Like Singapore, the RSAF overcame the odds and not only survived, but thrived to become a premier organisation that has gained a good measure of respect from the other mature airforces in the world today.

So, why do we need take a look at ourselves now? Can we not just follow the success formula that has worked for us in the last 35 years and continue with that?

To find the answers to these questions, we will have to look at where we are today. The world, as we knew 35 years ago, is very different from the world today. Even if we decide to follow the same success formula, we cannot guarantee continued success. On the contrary, if we do not review ourselves and continue applying yesterday's formula, we could run into the danger of becoming what James Collins, the author of *'Built to Last',* calls - the 'walking dead' organisation.

To further illustrate this point, can you imagine working on a computer with only 1MB of memory at your disposal today? Well, even the great visionary Bill Gates had said, not too long ago, that "1MB of memory is enough for everyone!"

To ensure that RSAF retains its relevance and edge, we have to constantly review ourselves. To do that one must start with taking a critical look at ourselves in the mirror...

A straightforward and simple enough task?

Apparently not so as Peter Senge, the acclaimed author of *The Fifth Discipline*, has cited that most organisations have learning disabilities that make it difficult for honest self-reflection on the current organisational realities.

One of the key reasons is that attempts at discovering current organisational realities typically end up, or appear to end up, as surveys of grassroots grouses. And it may indeed be true that many of these grouses are not so much real as they are misperceptions caused by differing perspectives at different levels of the hierarchy. After all, what we can see depends a lot on where we stand. What appears to be unfair treatment to a particular segment of the organisation may in fact be a necessary compromise when the needs of the whole are considered.

Nevertheless, perception is reality - we see the world through our own senses, and what they tell us is all that we can know. Perceptions, whether accurate or misconceived, should therefore be aired and addressed in constructive debate, for it is only through such discussions that greater mutual understanding can emerge.

The issues highlighted were meant to provoke deeper thinking and exploration and hence, deliberately not addressed in depth in this chapter. We wanted to avoid the trap of 'problem-solving', which tackling individual issues would lead to.

With this caveat in mind, we have tried to come up with a description of what the RSAF is today in this chapter. It may not be wholly accurate; some parts might be sheer misperception; but we believe it contains sufficient hard-hitting elements that will evoke self-reflection and thought.

And hopefully, that self-reflection will give you greater insight into what the RSAF is today.

> *"By Three methods we may learn wisdom: First, by reflection, which is noblest. Second, by imitation, which is easiest; and third by experience, which is the bitterest."*
>
> ***Confucius (551 – 479 BC)***

PATTERNS

In an organisation of almost 7,000 active personnel (22,000 including NSmen), one can expect significant variation in behaviour. However, as the word "organisation" implies, individual behaviour can also be subjected to powerful organisational influences that create pressure for conformity. Be it due to historical traditions, societal forces, or environmental circumstances, interesting patterns of behaviour are formed that reflect the character and culture of the organisation.

Better Qualification Profile

Officers and Specialists entering the Service are becoming more highly educated. While they are more capable, they are also more demanding. They expect more and question more. They are able to pick up any de-sync between talk and walk.

Disengaged Workers

Having disengaged workers is not necessarily positive or negative. They still can contribute significantly to the organisation. However, disengaged workers are compliant, not committed, because their hearts are not on the job. This becomes important when our technological and numerical edge narrows, because our edge then will come from our people.

Vocation-Specific Contributions

People are concentrating on a narrow vocational job scope, not aware of, or not bothering to contribute to larger system's effectiveness. This will become an impediment in the age of Network-Centric Warfare (NCW), where each node needs to be acutely aware of its role and the roles of the nodes around it, so that system effectiveness can be achieved without top-down, central synchronisation.

Constrained Communications

Although there have been occasions when feedback was forthcoming and leadership was responsive, the general perception is that people do not speak up enough and they think their opinions do not count. This can be viewed as either one of the causes or a symptom of disengaged workers.

Heightened Social Awareness

There is a growing social, civic and environmental consciousness in the population in general. Though these personal efforts might not be reflected

in official efforts (discussed later), this social awareness is something that can be cultivated and directed towards our general contribution to the society.

Programmed Social Contributions

There is a commendable effort by RSAF formations to adopt homes and to support charity events but contributions are limited to those selected charities. Because individuals probably have diverse interests as far as noble causes are concerned, such 'programmed contributions' might generate cynicism, and work against generating true service to the nation.

Little Non-Route of Advancement (ROA) Learning

Outside of ROA courses, there is little participation in other courses. While this has resulted in technically competent personnel, we might need more rounded people to deal with future demands.

Changing Work Perceptions

There is a general increase in emphasis on private and family time. This change has to be reflected in the management of our people, in what we demand of them.

SYSTEMIC STRUCTURES

From the patterns given earlier, we can identify the systemic structures that are both producing them as well as a product of those patterns and begin to surface the underlying culture and character of an organisation embodied in its shared mental models. If personnel in an organisation, for example, are not self-motivated learners, we will find systemic structures that both counter and reinforce this tendency, such as a preponderance of compulsory courses and training programmes (to force learning). This, however, typically teaches only the barest minimum needed for the job (students uninterested in other material). Our study of the RSAF's systemic structures should thus give us interesting clues to its organisational culture, and will be crucial towards understanding the mental models that pervade the RSAF.

Systemic Structures

Some people think the "structure" of an organisation is the organisation chart. Others think "structure" means the design of organisational work flow and processes. In systems thinking, the "structure" is the pattern of **inter-relationships** among key **components** of the system. That might include the hierarchy and process flows but it also includes attitudes and perceptions, the quality of products, the ways in which decisions are made, and hundreds of other factors.

Systemic structures are often invisible — until someone points them out. For example, at a large bank, whenever the "efficiency ratio" goes down two points, departments are told to cut expenses and lay people off. But when bank employees are asked what the "efficiency ratio" means, they typically say, "It's just a number we use. It doesn't affect anything." If you ask yourself questions such as: "What happens if it changes?" you begin to see that every element is part of one or more systemic structures.

The word "structure" comes from the Latin *struere*, "to build". However, structures in systems are not necessarily built consciously. They are built out of the choices people make consciously or unconsciously, over time.

Extracted from *The Fifth Discipline Fieldbook*. Copyright 1994 by Peter M. Senge, Art Kleiner, Charlotte Roberts, Richard B. Ross, and Bryan J. Smith.

Overseas Training

Because a large part of our training is done overseas, we have consciously or subconsciously imported portions of other Air Forces' cultures. We have benefited from the cross-fertilisation of ideas and have honed our tactics and doctrine. However, the long time spent on permanent detachments have also resulted in some of our people losing the appreciation of the constraints that face the RSAF. This gives rise to misplaced expectations and morale issues when the organisation is perceived as not taking their concerns seriously.
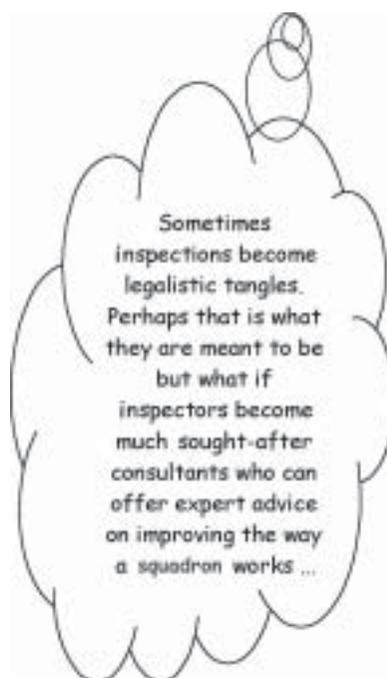
Hierarchical Structure

The hierarchical rank structure has worked so far for the military. However, this might lead to a tendency to command rather than communicate or manage. While command is certainly important for warfighting, it might not be the optimum mode of leadership in peacetime. Again, it has to be emphasised that the rank structure is not in itself bad and hierarchies certainly do exist in the corporate world. However, we have to recognise that ordering people around might lead to constrained communications and disengaged workers.

Need to Know

Indeed, high security is necessary to protect our edge. However it hinders Knowledge Management. The restrictions discourage people from learning outside their immediate job scope and encourage them to focus narrowly.

Competitions & Audits

Competitions are important to maintain our units' edge but some units time their performance to peak during assessment period. In addition, the performance indicators (PIs) used in the competitions become the bottom line and some units might focus on those indicators, neglecting other indicators of capability. While audits serve to ensure all toe the same line, people do not see much value-add beyond that (this is opposed to the paradigm where auditors are sought-after experts brought in to suggest improvements).

MENTAL MODELS

Identifying patterns of behaviour and the systemic structures that create those patterns helps us understand the mental models operating within an organisation. After all, mental models are powerful shapers of perception, being the filters and lenses, which not only colour our observations of the world around us, they create and sustain the very systemic structures that produce the patterns. Once we understand the RSAF's current mental models, we will then be able to see more clearly what we want in our vision for the RSAF.

Mental Models
- Determine how we see the world (pane of glass).
- Are mostly implicit - they exist below the level of awareness.
- Shape how we act.
- Why two people can see the same event and describe it differently. Because of their mental models, they look at different details of the event. The parable of three blind men describing an elephant illustrates this phenomenon.
- Even when we know our mental models, they are hard to change.

The skill needed for seeing and understanding mental models is *"watching our minds".*
- When our minds move at lightning speed, we actually leap to generalisations.

- We learn about generalisations by asking ourselves what we believe about the way the world works.
- Holding these beliefs up for reflection and inquiry and asking others for their opinion (Dialogue).
- Using the Ladder of Inference.

Mental Models are powerful because
- We believe our beliefs are THE truth.
- We believe the truth is obvious.
- We select data from our observations that reinforce the truth.

A common workshop exercise involves asking people to thumb wrestle.
- We tell them that "winning" means putting their thumb over the other person's.
- We ask them to "win" as many times as they can in 15 seconds.
- Most people pit themselves against their opponent, struggling to push the other person's thumb down.
- But a few partners look at each other, and then spend the 15 seconds flipping their thumbs back and forth, without any resistance, a dozen or more times.
- They are not held back by the mental model that only one person can win.

Fear of Failure

The fear of failure probably stems from a cultural stigma, and might lead to people being afraid of contributing outside their own area of expertise. While we may not be able to do much to change that start-state of our people, we can educate or train our people to adopt the right mindset. One way of accomplishing this is to understand more deeply how to balance a performance-driven mindset with a learning-oriented environment.

Fear of failure

The Fear of Failure can cause great inertia...

Just a Job

The mentality of regarding work as "just a job" is the root of disengaged workers. This leads to people focussing on noticeable or easily measured areas, and also on those areas within their narrow job scope. This mentality also de-links our job from our greater social responsibility.

> *"Aiyah! Work so hard, earn so little... what is the use?" Now, how often do we hear this phrase from our fellow colleagues and subordinates? (Hopefully not from our bosses!) Think about it. In fact, a Gallup Poll* has shown that employee performance is influenced primarily by their immediate boss and not by pay and benefits. Yet... it is a common belief that pay is the primary motivator to employee performance. Such beliefs often translate to sub-optimal employment of our people or even restricting them to their job scope. The belief that there is really no requirement to further motivate your people since their primary motivator must be their pay ...*
>
> ****Gallop Q12™ Employee Engagement Survey, 1992-1999***

Money as Primary Motivator

It is a common belief that pay is key to employee performance. This might lead to a self-fulfilling prophecy where financial performance incentives attract workers who are motivated only by money. This leads to a vicious cycle that leads to workers focussing only on those areas likely to garner performance incentives, which in the end leads to disengaged workers. The view that our people are mercenary and lack social conscience also leads to the need to structure social contributions.

"Science may have found a cure for most evils, but it has found no remedy for the worst of them all - the apathy of human beings."
Helen Keller

Form Above Substance

Everyone must be familiar with the mad-rush at a particular time of the year when USMS contribution targets would have to be met. It is not uncommon for units to conduct "USMS sessions" with extra duties meted out to those unable to contribute at least 15 suggestions.

USMS facilitators will also look out for potential 'multipliers' such as putting up "Please Remember To Lock Up Your Cabinets Before Leaving The Office" signs at 10 different locations, hence clocking 10 separate suggestions. With such 'tight' management on USMS, it is not unusual for these units to exceed their USMS targets, hence to appear highly productive (at least on paper). The irony is that the contrary is actually closer to the reality. This is an example of how Form is sometimes placed above Substance.

Form Above Substance

This mentality results in disproportionate efforts spent on presentation with low marginal utility. It encourages the need to "Look Good". It might also lead to a "numbers game" in performance indicators even if it might not reflect true capability. This might also lead to people who only do work that is visible, rather than systemic benefits that might not be visible to immediate superior.

Sometimes we spend too much effort on making our work look good. Perhaps the effort can be better spent on improving the content...

Fear of Change

People who fear change reject external suggestions for change. Middle management who fear change discourage feedback from the ground. The status quo is maintained across the entire organisation unless change is ordered from the top.

> *"Only the wisest and most foolish of men never change."*
>
> **Confucius (551-479 BC)**

a vision for our time

Very few people really know what a vision is, but that has not stopped many organisations from adopting visions (and their counterpart, mission statements) in order to lend credence to their change efforts. Unfortunately, this means that most visions are never taken seriously, nor even truly adopted in the first place.

Shared Vision

A shared vision is a vision that many people are truly committed to, because it reflects their own personal visions.

Shared visions emerge from personal visions. In order to build a shared vision, one has to give up traditional notions that 'visions' always come from the top management of the organisation. Instead, we must allow multiple visions to coexist, listening for the right course of action that transcends and unifies all individual visions. Thus, a CEO of today should listen to what the organisation is saying, and then make sure that it is forcefully articulated.

Visioning is an ongoing, participatory process that involves everyone. It cannot be commanded entirely from top-down because without acceptance at the lower echelons, the processes will fail miserably at the execution level. Similarly, it cannot be effected solely in a bottom-up approach because the divergence of ideas could result in a chaotic mess. In fact, both approaches should take place concurrently as long as the individual aspirations fit somewhat within the overarching framework of the top-level vision. The middle echelon plays the important roles of a communicator and a facilitator.

Visioning is only one piece of a larger activity: developing the governing ideas for the enterprise, its vision, purpose or

mission, and core values. A vision not consistent with values that people live by day by day will not only fail to inspire genuine enthusiasm, it will often foster outright cynicism.

- Peter M. Senge, *The Fifth Discipline: The Art & Practice of the Learning Organisation* (London: Random House, 1999), pp205-232

A more pragmatic approach, rather than getting into one-paragraph descriptions of organisational intent, might be to work down the levels of perspective that we climbed in the previous section. By first deriving the desired mental models that we want in the RSAF, we can then see what systemic structures must be created to express those mental models. In turn, these systemic structures would promote patterns of behaviour that are congruent with the vision desired.

The result is an action-oriented vision that stresses real changes to behaviours and processes, although that vision cannot be succinctly expressed in the one-paragraph format that most people are accustomed to. But then again, who said visions had to be expressed within one paragraph?

DESIRED MENTAL MODELS

Mental models are essentially entrenched sets of beliefs, assumptions and core values that shape the way we perceive things around us. Mental models form the structural framework that link loose elements in a systematic and coherent manner. People with different mindsets on the same subject will end up sporting different views because there are inherent rules within themselves that guide the way they receive and interpret information and their subsequent approaches and action taken. Hence in order to nurture a desired AF21 culture, certain common mental models are identified as essential cornerstones for laying the foundation. Among the set of desired mental models we identified are: sharing, ownership, accountability, empowerment, self-improvement, self-confidence, balance, and daring to try.

Sharing

In a large organisation such as the Air Force, resources are highly compartmentalised for systematic management. However, the downside of compartmentalisation results in a culture of stovepipes and turf-guarding of own interests, which are the greatest obstacles to smooth and efficient work processes and usually result in wastage of resources due to duplication of efforts. Moreover, as operations and projects evolve in complexity and scale,

greater demand on intimate co-ordination and integration across various units is necessary. Hence, in order to achieve synergy across different departments, people must have an open mind and be ready to pull together and share resources.

Especially in this knowledge-based society, the open sharing of information and exchange of ideas are vital for adding richness and diversity to our stock of knowledge. More importantly, one good idea often stimulates the birth of a better one, when viewed from different perspectives. Hence, knowledge-sharing not only achieves the basic function of information conveyance, but also helps in achieving higher order functions of mass-education and innovation. Moreover, knowledge sharing is free, unlike the sharing of physical resources, which involves real opportunity costs to the owner. Hence, it is a win-win situation and we must take cognisance of the benefits accrued and be ready participants to share our resources within the organisation.

Ownership

While it may initially seem paradoxical for the mental models of ownership and sharing to be coexistent in the AF21 culture, the fact is that resources are merely the ingredients; and processes are merely the standard recipes a chef uses in order to create his special dish. His culinary skills and experience are the x-factors that enable him to produce a dish that is special in its own way. He may be open to sharing of resources and recipes but it is really a sense of ownership of his unique creation plus personal pride that would drive him to experiment new methods and refine his skills to make his dish stand out from the same dish cooked by our mums at home, for example.

In AF21, each and every individual should take strong pride and ownership of his or her work because the quality produced is reflective of not just his or her personal ability but also of the attitude towards excellence. Especially for team projects, the contribution by each individual is not apparent and it would almost be guaranteed that unless there are a few self-sacrificial workhorses, the team project would turn out to be a failure if each player does not take ownership in his or her role seriously. On the other hand, a common question often asked is that for big projects, responsibilities are frequently dissected into numerous areas, how it is possible to gain a grip on individual ownership if there are so many parties involved. But we all know that if one person does not perform his job well enough, the effect will be snowballed downstream, hence affecting many of his colleagues. Hence, the notion of collective ownership is even more powerful than that of individual

ownership because it is sometimes acceptable when we let ourselves down but we never would want to let our good buddies down.

Accountability

The concept of accountability is closely related to the previous mental model of ownership. In the military, rank and hierarchy clearly delineate areas of work responsibilities, supervision of subordinates and authority for decision-making. Senior officers are then accountable for their subordinates in a pyramidal manner that may result in diluted attention and time accorded to each subordinate. A new approach to this mental model of accountability could be that of "I am responsible for my own learning and development". Hence each individual takes a pro-active stance in deciding how one could self-improve and contribute to the unit, rather than passively leaving the management of one's own career to one's superiors. After all, we know ourselves best so it is our own responsibility to find out what opportunities and options are available and how the superiors could assist us to achieve our personal goals. Also, when we have a vested interest in determining our own future, we generally become more enthusiastic in the decision-making process and take greater initiative towards achieving the goals.

Empowerment

Empowerment is a grossly over-used term in many management books, but what does empowerment truly entail in the context of AF21? As we expect our people to take greater responsibility of their own development, take more pride in the quality of their work produced and even be more vocal in expressing their views, the organisation must be ready to accord them with the authority and freedom to execute decisions and respect the value of the ideas they contribute. Thus, the concepts of ownership, accountability and empowerment form the three essential pillars of a mature and progressive Air Force. However, people must recognise that empowerment of authority is a double-edged sword; for when abused for personal selfish interests, it will result in the loss of trust and the removal of the freedom to self-manage.

Self-Improvement

The Air Force's success hinges on the collective contribution of every individual in his or her own area of expertise. However, as the RSAF continues to modernise, it will also mean that our people must constantly upgrade their specialised skill sets. Relying purely on formalised training and education provided by the organisation is definitely insufficient to keep one at pace

with the rate of organisational transformation. Hence, our people must be able to learn from various sources and adopt skill sets which will add utility to one's evolving job nature. Gone are the days where people are guaranteed "iron rice bowl" jobs from the point of entry. With more stringent demand and an evolving employment landscape, self-improvement becomes an imperative not just for success, but for survival in a competitive world. Above present-day job requirements, it is also prudent to accumulate knowledge and useful skills set, as a preparation for future job requirements, given the short career span in the SAF.

> *"Be the change that you want to see in the world."*
>
> *Mohandas Karamchand*
> *"Mahatma" Gandhi (1869-1948)*

Self-Confidence

The lack of self-confidence is a condition that seems to afflict people in Asian societies. The RSAF for that matter has not been spared. However, this condition is probably due more to the environment setting than genetics. For instance, Asians that are born and brought up in Western countries generally project a more confident image than their peers in Asia. The RSAF should strive to provide the same type of environment, via the appropriate systemic structures, to inculcate self-confidence.

Balance

Balance is the key to sustainability and holistic development. A natural tendency for most people is to devote their resources to areas they are proficient in but neglect areas where their weaknesses lie but are equally important. To be a World Class people, we must be able to strike good balances in various areas. At the organisational level, the bottom-line of our existence is "service to the nation". Hence, other than our core missions in defence, more emphasis should be given to building social responsibility. For instance, for the recent Severe Acute Respiratory Syndrome (SARS) outbreak, perhaps the RSAF could have contributed more resources to aid the nation in the combat of the epidemic. At the individual level, a better balance could be struck between time allocated to work, family and the society at large. As we contribute our time and effort towards our work, we must not neglect our duties to our family and the society at large. Lastly but most importantly, a good balance must be maintained within ourselves in terms of mental, physical and financial well-being.

"Far better it is to dare mighty things, to win glorious triumphs, even though checkered by failure than to rank with those poor spirits who neither enjoy nor suffer much, because they live in a gray twilight, that knows neither victory nor defeat."

Theodore Roosevelt

Daring to Try

In a military organisation, our work processes and even our thought processes are largely governed by rules and regulations set by our predecessors. We operate within the existing framework which generally guarantees a successful and safe execution.

Hence, there is great inertia to challenge the status quo. However, in reality standard procedures may not be evolving at a rate of change of other factors, such as environment, manpower or logistical constraints, resulting in a less than optimal utilisation of resources. Therefore, our people should learn to be more observant to changes and be creative in suggesting ideas for better methods of achieving the same objectives. People must be willing to venture out into new grounds and be daring to push the envelope more, even if it may result in failure occasionally. Otherwise, we may be missing out on rare opportunities and in the worst case, become irrelevant in our role altogether. Like entrepreneurs, we must be more daring to try new things and the organisation must also lend an equal support to such desires to improve and innovate.

DESIRED SYSTEMIC STRUCTURES

Systemic structures are the next level of perspective following that of mental models. Systemic structures are basically rules, policies and systems established in an organisation that govern the work processes. They can also be understood as tools or instruments used by the management to facilitate policies on a system-wide basis. To achieve the vision of AF21, we must be cognisant of what are the necessary system structures that must be built in order to support work processes conceived under different mental models. This will require both exploring new structures as well as revising existing ones in the areas of communities of practice, measures of excellence, simulated crises, challenges to status quo, and renewed priorities.

Communities of Practice

A conducive environment and a social network are essential building blocks to encourage people to be more forthcoming in exchanging their ideas and sharing their knowledge. Communities of practice could be formed informally whereby people from various units, holding different appointments and ranks, but with common aspirations, vision and interests, could network with each other. They could synergise their strengths to build their dreams into reality. Market places, whether physical or cyberspace ones, are nodes where ideas flow and people congregate. Perhaps in addition to messes, venues such as coffee places or even sporting grounds could be allocated for this purpose of interaction. For example, the RAND Corporation, a highly regarded think-tank in the US, hired a mathematician to design their headquarters in a manner that would maximise the number of chance interactions for workers as they went about their daily work. Thus, they located common facilities based not on convenient proximity but with an eye towards maximising chance meetings that could spark new ideas.

Measures of Excellence

As the organisation devolves more autonomy downwards to individuals to take on more ownership of their work and accountability of their own development, the methods for assessment must be revamped. For instance, outcome-based benchmarks that are tailored to work nature could be instituted as proxies for measuring productivity, effectiveness and competency of our people, rather than using universal set of standards for assessment. Another instrument could be through composite indexing whereby different weighted scores are pegged to a universal set of criteria so that the importance of each criterion could be adjusted with reference to the job requirements. With a more accurate system of assessment, people will be motivated to work effectively relative to the stated objectives. Most importantly, the means of assessment must be designed with maximum objectivity, fairness and transparency as the key considerations.

Simulated Crises

As a non-profit defence organisation, until the day war is fought and won, there are no means of measuring the effectiveness of the organisation. However, it will be way too late. In order not to slacken and allow ourselves to rest on our laurels, on an ad-hoc basis, we need to inject some form of "simulated crises" into the system to create a sense of realism and danger to assess how our people and systems react to such challenges. These ad-hoc

surprises should be complementary to present day large-scale exercises that entail in-depth planning and co-ordination. Especially so when the security environment has expanded to a full spectrum including Transnational Terrorists Threats (T3) and Low-Intensity Conflicts (LICs), it is even more relevant to simulate such sporadic attacks on our units to keep them on their toes at all times.

> **Best Unit Competition**
> We know that competition does bring out the best among us. First of all it instils a sense of competitive energy in each of us to do better. Second, it calls for more innovation on individual units to do more with their limited resources. Third, it allows the best units to be identified, so that their strive for excellence can serve as models for others to emulate. Last but not least, it provides recognition for units to put in the effort.
>
> On the other hand, we also recognised some shortfalls in the conduct of the competition, which may possibly lead to 'exam-focus' preparation by the units. To circumvent this concerns, the team is advocating a broader range of performance be measured during the conduct of the competition. These indicators should include both tangible and intangible ones. Furthermore, the assessment should be conducted over the entire year, in a randomly selected time. This assessment will take away the 'exam focus' type of mentality by some units, and all the units will at all times be 'on-the-ball'. This is one example of how 'simulated crises' can be incorporated into our organisation. The idea is to conduct competitions that will help produce the best units FOR the RSAF rather than IN the RSAF.

Challenges to Status Quo

Since the RSAF has monopoly of defence in the air domain, the lack of competition may not push the organisation to perform at its optimum, relative to the resources allocated. Therefore pockets of "auditors" could be commissioned at various levels and departments, to scrutinise and critique the imperfections that could be overcome with better systemic structures. Critique sessions could be conducted internally within meetings, debrief sessions or even shared externally during forums and seminars. Importantly though, people must possess a correct and open attitude towards such critique

as the purpose is meant for sharing and collective betterment rather than personal attacks. Ideally, as critiques of shortcomings are surfaced, feasible alternatives should be recommended. In order to capture the value of these recommendations, upon all-rounded consideration and endorsement, the system must be responsive and flexible enough to implement the recommended changes. Much like the Safety Information System (SIS) instrument, if the RSAF can provide systematic tools for self-critique and immediate reviews and necessary actions taken, then as an organisation, we would have truly transcended into a First Class Air Force.

Renewed Priorities

As we acknowledge the importance of balance and holistic development for the organisation as well as the individuals, some of the existing systemic structures could be further fine-tuned to increase flexibility and personalisation to cater to personal needs. For example, in terms of working hours, perhaps more flexibility could be built in (such as working from home on a half-daily basis) to cater to working mothers as we acknowledge the additional domestic demand placed upon them. Another possibility is to allow for sabbaticals (or no pay leave), for individuals to engage in meaningful personal pursuits such as humanitarian relief operations, personal development courses, sports competition, missionary trips and even travelling. Basically, the organisation respects individual aspirations and provides the options for different rates of progression in the officer's military career. Our people must be respected as assets who should be given the freedom of choice in terms of career prospects rather than inanimate resources that could be manipulated and utilised at will.

DESIRED PATTERNS

Patterns are a consequence of the systemic structures that are embedded in an organisation. They are manifested in the trends and changes in things over time. Desired patterns have the effect of encouraging the right types of responses (events) when problems arise. As much as systemic structures are the tools used by the management to facilitate AF21 to operationalise the desired mental models into concrete reality, the patterns are where we test how well our theories are producing the results that we desire. This provides us with the 'nuts-and-bolts' test to see how well the vision framework holds together. A key point here is to continually monitor and learn how our desired systemic structures and patterns produce a coherent and mutually reinforcing relationship that moves us ever closer to our desired future reality. In particular, we should pay close attention to whether the structures are helping to produce higher education profile, increased self-confidence,

heightened social awareness, high job satisfaction, good retention rate, proactive learning increases, increased role for Warrant Officers, Specialists and Airmen (WOSAs).

Higher Education Profile

Education level is a widely used proxy for quality. To borrow an economic term, education is a 'signal' for higher calibre and more motivated individuals to indicate their ability to potential employers. By enrolling in academic programmes that are more demanding, they try to distinguish themselves from those who do not or are unable to. Education profile serves two purposes in our organisation. Firstly, it enables us to select the more qualified individuals from the supply pool to join the organisation. It also allows us to showcase the quality of the organisation to external parties who would otherwise have no obvious way of knowing how good the organisation is.

To become a truly first class organisation, we must have well-educated people throughout all ranks of the hierarchy. To achieve a desirable education profile, we must keep up with the times and ensure that our entry requirements do not fall below the appropriate benchmarks for other government and private organisations. For example, the civil service generally only takes in degree holders for executive-level positions, which can be pegged to our officer appointments. A system-wide policy of continually upgrading our people's education qualification must be pursued. This will ensure that people who are already in the system and are likely to stay for another 15 - 20 years will not fall too far behind the rest of the organisation.

Increased Self-Confidence

Self-confidence is a character trait that one may be naturally born with or without. However, it can also be nurtured through a virtuous cycle whereby good knowledge and skills displayed in one's quality of work reinforces greater job satisfaction and positive self-esteem in return. It is important for our people to be proficient in their work and feel confident about themselves because the harsh nature of our jobs dictates that a mistake in judgement may entail the loss of lives or huge amount of taxpayer's money. Realistic and tough training and exercises are the best way to prepare our people mentally as well as physically so as to build the self-confidence in them that when they are called to a mission, they will be more than capable to deliver what they have been trained for.

A key barometer of the level of self-confidence is the number of people that actually stand up and air their opinions at MINDEF/SAF-organised

seminars or forums. To further foster self-confidence, people should be allowed to write in to Air Force News or any online bulletin boards to state their views on various issues.

Heightened Social Awareness

All the great companies in the world, such as General Electric and Microsoft, are socially active in their local and wider communities. They are considered to be first-class organisations because they are able to divert resources from their core businesses to other worthwhile causes. Being socially responsible elevates an organisation's raison d'être to a higher level, thus distinguishing it from the others that are only concerned about day-to-day issues. The day the RSAF is mentioned in the same breath as these companies in terms of being socially responsible and activity in community projects will be the day that it has arrived.

High Job Satisfaction

It is no coincidence that companies that are leaders in their industries also do remarkably well in the "Best Companies to Work For" surveys. A company made up of satisfied employees tend to outperform one that is full of disgruntled workers, all else being equal. Similar surveys can be done for the RSAF and the results can be benchmarked against other civil service organisations or even private companies. More importantly, the results of the surveys should be used to identify and rectify the 'problem areas' in the organisation.

Good Retention Rate

As a first-class organisation, we should not have any problems retaining our people, even in good economic times. Poor retention rates result in loss of 'organisational knowledge' and burden invaluable training resources. However, our approach must not be one that seeks to retain personnel at all costs. We should only be interested in retaining good-performing individuals and not the 'deadwood' that persists in every organisation. Surveys done in foreign armed forces have shown that most people do not quit their jobs due to unhappiness over their remuneration. Attempting to improve retention rate through the pay mechanism has the unfortunate effect of attracting the wrong type of people to join the organisation. One solution to the retention problem is to pay competitive wages and complement it by engaging and inspiring employees through other means.

Proactive Learning Increases

It has often been said that in the SAF, learning stops after an individual has completed all the basic ROA courses. If this is true, then the individual has to rely on what he has learnt in the first couple of years to tide him over the remainder of his career with the SAF. The subsequent ROA courses such as command and staff course and the experience accumulated along the career may help to mitigate the situation, but there is no reason for learning to be restricted to ROA courses. Opportunities should be created for people to learn throughout their career, be it through sponsorship for external courses or even web-based courses.

Increased Role for WOSAs

WOSAs form the backbone of the RSAF organisation. In terms of experience and subject matter expertise, they should be second to none. They should be given greater roles in the organisation, especially against the backdrop of their extended career to 55. Thus far, it has been a 'chicken-and-egg' dilemma - do we allow WOSAs to prove their ability before opening up more 'officer-type' jobs to them, or should we open up the jobs first to let them prove their worth? Two trends point towards the latter. Firstly, the education profile for WOSAs has increased steadily over the last decade. Compared to the officers' education profile 20 years ago, the profile for WOSAs today is indeed better. Secondly, an extended career has the effect of increasing the number of years spent in each appointment. This means that WOSAs will have more time to adapt and 'grow' into their appointments. Ultimately, in today's knowledge-intensive world, the RSAF cannot afford not to fully utilise all its resources efficiently.

a path to tomorrow

> *"At every critical point in our history, we have risen to the challenge. We have been nimble and bold enough to make tough adjustments. We have moved swiftly to seize the opportunities. Yes, the future is uncertain. The journey will be tough. But let us press on. We may not be able to change the world. But we can remake Singapore. We will make tomorrow brighter than today. Let no challenge stand in our way."*
>
> **Former Prime Minister Goh Chok Tong**
> **at the 2002 National Day rally**

After examining our current state, and realising where we want to be, how then do we hope to attain the desired realities?

In order to bridge the chasm between the two states, we need to develop an appropriate strategy through understanding the gaps across all the different levels of the Vision Deployment Matrix. Ultimately, the end goal for the organisation is to have its people adopting behaviours that approach to those that are desirable (as in Desired Realities).

Once we have identified the general strategies to move forward, some broad-based measures are also proposed by the team to form part of the systemic structures to encourage change. These measures are not meant to be all encompassing or prescriptive, but rather they serve more as an illustration of some of the baby-steps we can take.

As we have understood from the earlier chapters, the disparities between the Current and Desired states lie in all the five levels, from Vision, Mental Models, Systemic Structures, Patterns of Behaviour and Events. Of the five levels, Vision and Mental Models are at the Generative and Reflective levels. They provide the foundation for the rest of the levels. Through a change in the organisational vision and working mental models, we can establish creative systemic structures to develop and shape behaviours and events. *See Appendix I.*

With the Air Force 21 (AF21) vision document, a bold statement had been made about what we want to be in the future. What had also become clearer to us was the chasm between our *espoused vision* of 'World Class People, First Class Air Force', and the *vision-in-use*, which is the tacit or implicit vision that tends to guide current reality. But how then can we move towards it? If our tacit vision is still one of a "*Just-do-it*" mentality, we would still be operating with the wrong mental models. If left unchecked, that would lead to the perpetuation of an adaptive or reactive orientation – where all we "care" about is our own area of work or "fire-fighting".

Change is never easy, especially in organisations that take pride in tradition. The point is perhaps best made with this apocryphal transcript of a radio conversation between a US Naval Ship and Canadian authorities off the coast of Newfoundland.

Americans: Please divert your course 15 degrees to the north to avoid a collision.

Canadians: Recommend you divert YOUR course 15 degrees to the south to avoid a collision

Americans: This is the captain of a US Navy ship. I say again, divert YOUR course.

Canadians: No, I say again, divert your course.

Americans: THIS IS THE USS MISSOURI. WE ARE A LARGE WARSHIP OF THE US NAVY. DIVERT YOUR COURSE NOW.

Canadians: This is a lighthouse. Your call.

Although the above account has been officially denied by the US Navy (see http://www.chinfo.navy.mil/navpalib/questions/litehuse.html), it makes the point very succinctly.

STRATEGIES FOR CHANGE

Tacit vision and mental models are not easily transformed, as they tend to be very entrenched inside us and are a result of previous experiences and often unchecked assumptions. In order to support change in mental models, we need to have a clear sense of the new and desired mental models so that we can set up the proper structures to support the new desired behaviours and mindsets. We hope that the vision for the traits of World-Class People is compelling enough to motivate change in our mindsets. This change in mindsets has to start from the highest level of management. It will demand that all levels engage actively in open and honest dialogues about the current realities and future of the RSAF. Hopefully then, this sense of purpose will in time to come be truly shared by the masses and show up in the form of desired Patterns (success indicators) and Events (success "stories") that demonstrates our vision is indeed alive and meaningful.

While the strategy in principle may seem simple, the implementation is certainly by no means straightforward. There are no standard formulae or guaranteed solutions readily available that we can adopt. We can however learn from some of the success stories from our experiences. Two case studies that we can certainly learn from: the in-house RSAF Safety Culture and the SARS crisis management in 2003.

The RSAF safety movement started as a result of a series of aircraft accidents in the early 90s. The mindsets then had been more of the gung-ho mentality, and when superior flying skills were equated to flying with risk and under adverse conditions. Started from the highest management, it was realised that a quality Air Force could not be losing aircraft during training or reckless flying behaviour. In order to inculcate the right safety culture, a most comprehensive approach was taken. The safety mission is clear and consistent. The measures taken and structures set up are pervasive. They permeate through all the levels of the hierarchy, from the highest level of decision-makers to the very last technicians working on the aircraft. The message is clear for all different vocations, from the pilots to ground crews that are working with support equipment. In other words, from top to bottom, there is no ambiguity in the emphasis towards safety.

The other example is the Singapore SARS crisis management in 2003. The most visible aspect of the management was the topmost emphasis. The rally from Mr Goh Chok Tong, Singapore's former Prime Minister was loud and clear. The same message was echoed by the rest of the government, the

mass media and community leaders. This ensured that the same consistent voice was heard by everyone, down to the last persons.

We can certainly get some inspirations from these two successful programmes, as we strive to change our mindsets. Of course, particularly inspiring for us is the success of the RSAF safety movement. It illustrated that if we are in it together, we really do have what it takes to change, like we had done before.

> *"Faced with the choice of changing one's mind or proving that there is no need to do so, almost everybody gets busy on the proof."*
>
> **John Kenneth Galbraith**

PROPOSED IMPLEMENTATIONS

Knowing where the centre of gravity will be for the transformation of the organisation, what are then some actual measures that can be taken by the management to change the people's mindset?

During the team discussion, some of these measures have been brainstormed. By no means this list is complete, as we understand that an organisational transformation does require a very systematic and comprehensive package for all levels of hierarchy.

Some of these proposed measures can be implemented at different levels of the organisation and all will take time for them to be effective.

Communication

Communication is certainly of great importance as it is the portal for exchange of ideas and information. For mental models to be shaped, it is important to create channels for people to disseminate information, discuss concerns, bounce off ideas, challenge concepts, feedback thoughts and generate new ideas. Thus, it is not just about top-down directives, but also bottom-up feedback, as well as peer interactions, becoming a multi-way process. This model can be likened to the way the Internet works: multiple server and client nodes to facilitate free exchange of ideas.

For this to happen though, our people must first learn to open up and speak more freely and constructively for the common good. For everybody

to level up on the 'articulation scale', we can leverage on some tools and one that is already being used in MINDEF (mainly in the Army, at this point) is the Learning Organisation (LO).

LO provides a framework and a common language for everyone. There are various techniques and tools being made use of within the framework of LO, as enablers for the communication of ideas. This makes the exchange of information more structured and certainly more easily understood by different people. One ever-present consideration about communication is the tendency of 'miscommunication' since people do speak differently and use different terms for the same idea. LO is useful as a vessel to cross this communication conduit.

Currently, a formalised course is already being conducted in the Singapore Command and Staff College (SCSC). This should also be done for courses at all levels, starting from Air Force School (AFS) and Officer Cadet School (OCS), to Joint Warrant Officers' Course (JWOC) and RSAF Advanced Officers' Course (AOC) and onwards. Through endorsement of these LO courses, a generation of Officers and Specialists can be equipped with the tools and techniques to assist them in the exchange of ideas.

To kick-start LO, the organisation will also need a core group of facilitators to serve as LO champions and icons for the movement. This group of 'motivators' will serve as the 'launch pads' for the movement at the various units and levels of hierarchy. And hopefully through time, sufficient numbers of both in-service personnel and newcomers become converts of LO, thus setting the stage for more interactive communication.

> **Learning Organisation**
>
> A learning organisation is an organisation that learns and encourages learning among its people. It promotes an exchange of information between employees hence creating a more knowledgeable workforce. This produces a flexible organisation where people accept and adopt new ideas and changes through a shared vision.
>
> Peter M.Senge, the author of the highly successful *The Fifth Discipline*, has postulated that 'the Organisations that excel will be those that discover how to tap their people's commitment and capacity to learn at every level". He theorised that the core

of learning organisations is based upon five learning disciplines, which are personal mastery, mental models, shared vision, team learning and systems thinking. In learning organisations, it is believed that individuals who are committed to these disciplines adapt to change better which is the only thing one can possibly predict for the future.

Communities of Practice

The concept of Communities of Practice (CoPs) started in the commercial sector, and is usually thought of as 'a group of people informally bound to each other through exposure to a common problems and common pursuit of solutions". In essence, they are a group of people who share similar goals and interests. The interesting concept embedded in CoPs is that this group of individuals, bound together NOT by structure but by interests, is expected to produce better practices or solutions.

Why is formation of CoPs beneficial to us, an organisation that is known for its hierarchical structure (MINDEF in general)?

In a formalised structure (as in our demarcation of departments and branches for HQ RSAF), people in different departments are likely to encounter problems in communication. These difficulties exist as a result of different working language, different work focus, "turf guarding" i.e. each looks after its own territory, as opposed to global organisational good.

On the other hand, if there is an avenue for people of the same interests to work together (informal arrangement, or temporary formal set-up), their mutual passion will generate a much better working environment. The team members tend to collaborate with each other better as they understand that they are trying to solve the same problem. The common motivation is there to spur the team to perform better than the sum of their individual efforts, since the members are more eager to exchange ideas.

The concept of CoPs can actually be implemented with limited resources within RSAF, though the success of it really depends on the people participation. We do need to create space for people to come together voluntarily.

Currently in RSAF, from Wrangler's study group, task forces, focus groups, event and function communities are formed through formalised tasking, or

what we call "arrowed'. It is not to say that everyone in these teams are unmotivated, but there are, more often than not, members who are just in for the ride. Most of the time, these teams are formed to solve a certain problem or to address a certain concern. However without the full contribution of individuals, the potential of the team is not realised.

To create a formalised structure for CoPs (this may sound like an oxymoron) will likely be a long-term project. This may even include drastic measures such as breaking down the current departmental structures and branches to allow for the formation of teams (for example, integrated product teams). At this point in time, Air Logistics Department (ALD) is already functioning on the concepts of Integrated System Engineering Teams (ISETs) to provide an all-rounded management of the air platforms. For this to apply organisation-wide, a long-term commitment from the organisation will be needed and certainly requires fine-tuning and community support.

However, we can still kick-start the concept of CoPs in smaller units. To raise people's awareness of CoPs, units can start off with more informal projects. For instance, units' Dinner & Dance functions or Family Day can be organised by volunteers, rather than appointing the committee members. Another example will be to form teams comprising personnel who have returned from long overseas permanent detachment together with the local base personnel. This will facilitate the exchange of lessons learnt from other operators and better assimilate these new ideas into our systems as improvements. Once the idea of CoPs is more familiar to individuals, unit commanders can start to experiment with 'advertising' for volunteers to conduct more formal work-related study groups. Hopefully, this will get more people interested in coming together for problem resolution.

One mental obstacle for advocating this concept is time. We are busy people, who apart from our primary jobs do hold one or more secondary appointments. There will be people who say "but where do I find the time for such extra-curricular activities with the work that I am doing?" To address this concern, individual contributions to such CoPs must be formally recognised as part of their achievement. Furthermore, with wider practice of CoPs and its concept, interested individuals can even bid for the secondary appointments.

Certainly in the long run, CoPs concept will be beneficial to the organisation, since it creates space and removes barriers for people who are

genuinely interested in improving specific aspects of the work place by coming together. The teaming of these people will spin off constructive ideas and bring about new energy to the work environment.

Small Steps, Giant Leaps

How many times have we seen initiatives, with undoubtedly good intentions, collapse due to grand ambitions of trying to launch it in a big-bang manner? The big-bang approach entails forcing sweeping policy changes almost overnight, introducing formalised processes, compulsory participation, meeting definitive quotas etc. We recognise and remember some of these initiatives which could still be in existence today or have become another forgettable event in the history of the organisation.

The success of the RSAF over the last 35 years cannot be overstated. The strong institutional foundations that were laid by our pioneers have served us well in the past and we are not about to demolish them overnight. However, to fully achieve the AF21 vision, we need to bring about a cultural change within the organisation.

There are two schools of thought for organisational change theory. One expounds the approach of creating continuous, or incremental, change. Much of this change is embodied in the quality improvement or continuous improvement efforts of an organisation. The diametrical opposite to this is discontinuous, or radical, big-bang change.

So what is RSAF's optimal strategy towards creating cultural change within the organisation? Do we immerse ourselves in the chaos theory and bring about sweeping changes overnight? Or do we adopt an incremental approach and make gradual changes with small steps?

Looking forward into the next decade, there are strong reasons to believe that the RSAF will continue on its trajectory of success. While this does not mean that the RSAF can afford to rest on its laurels, it does mean that time is on our side to bring about meaningful changes. There are two main reasons to support the case for making gradual changes.

Firstly, the RSAF is a large organisation whose training activities span across four continents. To effect a gargantuan cultural change, as we have

learnt in Newton's Third Law of Motion, is likely to bring about an equally large-scale resistance.

Hence, it is almost always better to bring about small changes in selected niche and high leverage areas to create the momentum for the rest of the organisation to follow suit. For instance, focusing on achieving developing World Class People in the training domain initially may eventually lead to a positive spill-over effect in the operations domain.

Secondly, the environment that we exist in is in a constant state of flux. The demand for organisational change has accelerated at an extraordinary rate in recent years. Emerging technologies and changing markets sweep through organisations at an ever increasing rate. An organisation's desire to meet these challenges will lead to a chaotic condition of change if not well-managed. By adopting a one-off transformational change effort, we may miss out on the other developments that have occurred in the midst of our transformation. Ultimately, we want our 'change vehicle' to be a nimble fast craft that can quickly change direction according to the terrain, rather than a supertanker that is likely to over-steer or under-steer and run ashore.

> A man wishing to plant a tree in his yard was advised against the idea by his gardener. *"The tree would take a hundred years to bear fruit,"* said the gardener. *"In that case," said the man, "We had better begin immediately."*
>
> ***John F. Kennedy***

I can make a difference

Finally, the team feels that a key strategy, without which all the other strategies above would be made obsolete, is the *"I can make a difference"* mentality in every single individual.

Having appreciated the over-arching RSAF Vision of "World Class People, First Class Air Force", we should start to look at what we can do within our own sphere of influence to move the vision forward. We should not be looking towards higher management for formalised initiatives to kick start the process and we all know now that even if there was, it will not work without the conviction and buy-in from the people in the organisation.

Regardless of our position in the organisation, with sincerity, we can

definitely influence the people around us more then any campaign can. The little things we do will go a long way towards moving the AF21 Vision forward more than any big-bang approach can.

World Class People, First Class Air Force starts with every single individual.

Remember, you can make a difference.

Make A Difference

As the old man walked the beach at dawn, he noticed a youth ahead of him picking up starfish and flinging them into the sea. Finally, catching up with the youth, he asked why he was doing this. The answer was that the stranded starfish would die if left in the morning sun.

"But the beach goes on for miles and there are millions of starfish," countered the old man. "How can your effort make any difference?"

The boy looked at the starfish in his hand and then threw it into the safety of the waves. "I can make a difference to this one," he said.

Extracted from *The Sower's Seeds* by Brian Cavanaugh, T.O.R.

rethinking ourselves

A bright and illustrious student, having won many awards and prizes, thought to himself, "I am the best student there is, and already so successful, is there anything else that I need to know?" After pondering upon this for some time, the student decided to consult his old mentor and teacher. "Greetings, dear teacher! I would like to learn more, if there is indeed more to learn..." began the student, rather pleased and self assured. The teacher smiled and asked, "Would you like some tea?" The student nodded and the teacher proceeded to pour tea into a cup. Having already filled the cup to the brim with tea, the teacher continued to pour tea into the filled cup. Taken aback by this rather strange action, the student began to protest, "Teacher, please stop! The cup is already full." The teacher looked sternly in the eyes of the student and said, "I cannot fill a mind that is already full. Come back again when it is more open."

Here the story ends, but its lesson should be clear.

The RSAF as an organisation has been bright and illustrious, having won accolades from the world's premier Air Forces. We have come far, given our humble beginnings, led by officers and men from the first generation of the RSAF. The growth and progress of the RSAF is characterised by an enlarged capacity to shape, build-up, and fill structures with platforms, to "mould a cup" in the metaphor above. However, lest you think that our formula for success will continue to serve us, closer examination will reveal that this formula, as good as it may be, can be copied by others with the requisite will and resources to do so. All cups, given time, will eventually be filled. When the leadership of the RSAF deliberated on the vision for the RSAF in the new millennium, this need to transform the RSAF into an even better Air Force, necessitated by the considerations mentioned, was key in the overall scheme of things.

But how do you transform an organisation that thinks it has learnt all there is to learn? How do you get the RSAF to empty out some of what's already in the cup, so that more learning can take place?

In order to learn and improve, we must be open and willing. The changes to be made are thus in the heart and the mind, not the platforms or the weapons. Our next stage of growth will be spurred not so much by the linearity of systems and technology, but rather by the enabling and empowering of the human mind. That is why our vision is that of World Class People, First Class Air Force. That is why the first step towards transformation is rethinking ourselves.

> *"The most effective way to cope with change is to help create it."*
>
> **L. W. Lynett**

appendices

APPENDIX I - LEVELS OF PERSPECTIVE

There are multiple levels from which we can view and perceive the world. These are - events, patterns of behaviour, systemic structures, mental models and vision.
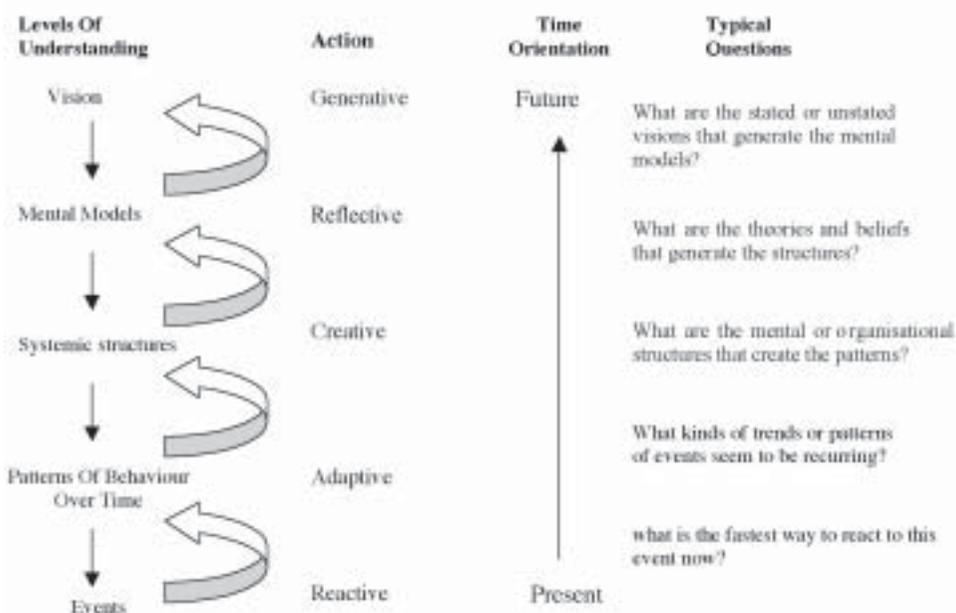
- **Events** are the things we encounter on a day-to-day basis

- **Patterns of Behaviour** are the accumulation of events which when strung together as a series, can reveal recurring patterns over time

- **Systemic Structures** refer to systems, structures, processes, policies, and procedures that are part of an organisation's infrastructure.

- **Mental Models**, our deepest beliefs and theories about the world, can be viewed as the "systemic structure generators' because they are like the guiding specifications responsible for creating structures.

- **Vision** can be viewed as a guiding image that "sponsors'" all our mental models

When things happen, there is usually a need for an immediate reactive response. However, in our modern world, the greatest threats to our survival or health are often far less obvious or immediate, though no less deadly. This is the reason why we need to expand our range of actions beyond reactive to tackle these threats. The actions are namely adaptive, creative, reflective, and generative actions.

Adaptive - Taking Adaptive actions at a pattern level provides us with a different leverage than that of reactive. It allows us to anticipate and be prepared for situations that are more likely to occur due to recurring patterns.

Creative - Actions taken at a systemic structures level are creative because they help to create different patterns.

Reflective - Systemic structures are based on our mental models about the kind of structures we believe will best serve our needs. These beliefs are the ones that provide continual support for existing structures to take place. In order to be effective at this level, we must take more reflective actions - one that helps us to test our mental models.

Generative - At the level of vision, we hold an image in our minds that guides what we do on a day to day basis.

All five levels are important for developing a systems thinking perspective, especially because we live in an event-orientated world, and our language is often rooted in that level.

One of the most important messages of the "Levels of Perspective" framework is that we must recognise the level at which we are operating and evaluate whether taking the corresponding action provides the highest leverage for that situation. Each level offers different opportunities for high leverage actions, but they also have their limits. The challenge is to choose the

appropriate response for the immediate situation and find ways to change the future by operating at multiple levels. It is also important to note that this process of gaining deeper understanding is not a linear one.

Extracted from *Organizing For Learning* by Daniel H. Kim

APPENDIX II - THE LADDER OF INFERENCE

The Ladder of Inference is a helpful tool for understanding how our mental models are formed. The ladder is a tool of Action Science, developed by theorists Chris Argyris and Donald Schön, that traces the mental processes that lead us to form and maintain mental models. The steps of an example are as follows:

1. I select data: "When I proposed an idea at the Monday morning staff meeting, no one said anything."

2. I add meaning: "There is no follow-up to anything I am saying."

3. I make assumptions: "No one appreciates my ideas, or how valuable I could be to this team."

4. I draw conclusions: "I'd better not say anything else during meetings."

5. I adopt beliefs: "I must not be competent."

Reflexive Loop

6. I take action: I stop speaking in meetings.

7. I get results: People stop looking to me for input. I then notice this "data" and decide that my belief is true—that I am not competent.

The Ladder of Inference

5. I adopt *beliefs*.

4. I draw *conclusions* from the assumptions.

3. I make *assumptions* based on the meaning.

2. I add *meaning* to the data I've selected.

1. I select "*data*" from the "pool"

Start here

Observable data

6. I take *actions*.

The Reflexive Loop

7. I get *results*, which create more observable data.
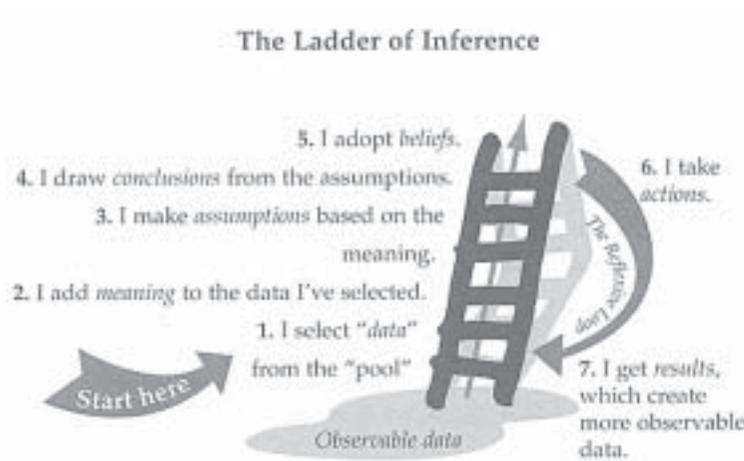
APPENDIX III - VISION DEPLOYMENT MATRIX

The authors of this monograph have used a framework known as the Vision Deployment Matrix (VDM) developed by Daniel H. Kim (see "Vision Deployment Matrix: A Framework for Large-Scale Change", in *Organizing for Learning*, distributed by Cobee Trading Company, Singapore), to frame their discussion. This tool was taught and practised during the Vision Deployment Workshops conducted for the middle to upper echelon RSAF officers in 2001/2002, during the capacity building phase of the AF21 programme.

The VDM is a very powerful and highly intuitive systems-thinking tool that can help organisations or even individuals bridge the gap (known here as 'the chasm') between their current reality and their espoused vision. In order to walk through the VDM process effectively, every single individual must have a good appreciation of the current reality and must also be clear on the desired organisational vision. The key thing to remember is that the focus is on the conversations and insights that emerge from the tool and should never be used as a "form to be filled up".

Level Of Perspective	Desired Future Reality	Current Reality	Gaps, Open Issues and Questions	Action Steps	Indicators of Progress	Timeline
Vision	Corporate Vision Statements					
Mental Models						
Systemic Structures	The Chasm					
Patterns						
Events		Daily Crisis				
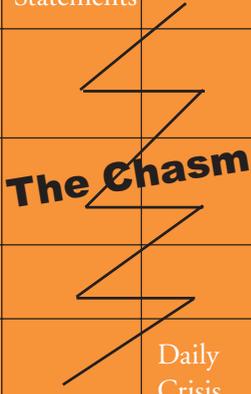
Note: Our ability to influence the future (leverage) increases as we move from events to vision.

A walk-through summary of how to go about using the VDM:

- Start at the vision level of Desired Future Reality.
- Move down the levels of Desired Future Reality:
  - Mental Models: Beliefs and assumptions that will be congruent with the vision.
  - Systemic Structures: Ways in creating systemic structures that are congruent to our beliefs.
  - Patterns of Behaviour: The patterns of behaviour the structures would produce.
  - Events: Events that would indicate the vision is achieved.
- Now describe the Current Reality of events.
- Fill in the remaining cells under the Current Reality: Upon reaching the vision, think about a vision that governs the working principle of the organisation today.
- Identify Gaps and Challenges at each level.
- Formulate Action Steps to close the gaps.
- Establish Indicators of Progress: It will be more helpful to establish time frames in which to expect progress at each of the levels.

Note that the vision deployment process is a continual and iterative one. We should therefore continue to clarify what goes in every part of the matrix.

Another important point to keep in mind is that the VDM is meant to guide a generative process of *creating* one's Desired Future versus a problem-solving process of *fixing* Current Reality. This means that even as you clarify aspects of current reality, the focus should always be on making the link to how that contributes to creating the Desired Future.

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Singapore had just witnessed the appointment of it's third Prime Minister. As the new PM said, this was more than just a change in leadership - it marked the transition of a whole generation. This is a generation that has higher expectations, but at the same time, is also one that is more ready to articulate their views and perspectives on issues that they care about. "A Vision for Our Time" is an example of a document that is born of an emerging cadre of Singaporeans - from the initial conception of a radical idea for a vision monograph, to the selection of its diverse editorial team, and the candid reflections on issues about the future of the RSAF, the team offers their ideas as an invitation for dialogue and a rally call for all stakeholders to join up with them in the creation of an exciting and hopeful future. Over 2001 - 2002, I had the privilege of engaging with many emerging leaders, Squadron Commanders, Branch Heads, Pilots and Professionals from various parts of the Air Force as they embarked on a journey to clarify their vision. While each brought with them their diverse perspectives, views and contributions for what they hope to see in the future of the RSAF, all were rooted by the same commitment to create a sterling Air Force, and none was willing to settle for anything less than the best for the people whom they lead. They have demonstrated for me that the best way to make a vision to come true is to live it.

- Jacqueline Wong,
Sequoia Consulting & Adjunct Faculty,
Center for Creative Leadership

As Singapore approaches its 40th birthday, there is plenty of good cause for celebrating its many accomplishments. It is also an appropriate time to engage in deep introspection about its future. Having largely conquered the challenges of building the physical infrastructures of government, business, and military to their current world class status, Singapore must tackle new challenges in its next stage of development. In the words of the authors of this inspiring monograph, Singapore "must now move on to the new frontiers of the soul and the mind". The authors raise concerns about the current reality with unflinching honesty and offer new ideas for the future with an energy that is full of the very same fire and drive to succeed revered in the first generation of leaders. Based on our nine years of working with numerous organisations in Singapore, we believe that "A Vision for Our Time" provides valuable insights for any organisation (government or private) who is committed to making Singapore's next 40 years as remarkable as its first.

- Daniel H. Kim,
Co-founder, Pegasus Communications, Inc
and MIT Center for Organizational Learning