

THE LEADERSHIP INTERVIEW

with **Chan Tsan**

Chief Executive, Home Team Science and Technology Agency



I see myself as a chief enabler. CE can stand for chief enabler. I'm here to enable, to enable my staff to succeed, to remove obstacles. The job of a leader is growing his people, so that's the way I see myself.

”

His personal story does not matter, says Chan Tsan. The first Chief Executive of the Home Team Science and Technology Agency (HTX) believes the job of a leader is to inspire people to dare to try, to learn, to exceed expectations, to rally around the cause and not the leader himself.

In the Leadership Interview with *Journal* Editor **Susan Sim** soon after celebrating HTX's first anniversary, Chan is candid in discussing his vision for HTX, his leadership philosophy, and some of the hard choices he has had to make since taking up appointment as head of the Home Team's latest agency. His pride in the 1,300 HTX staff is palpable – they had in one year made the transition from working for individual Home Team Departments to working as one entity for the entire Home Team without “dropping any balls”, and at the same time, embraced the challenges posed by the COVID-19 pandemic, taking on new missions to become a force multiplier for the departments.

“In hindsight, it was a good thing that HTX was formed just before COVID. If not, I would imagine it would have been a lot more difficult for the Home Team Departments to pull this off together because the resources would have been spread out all over the place,” he says when asked if it was fortuitous that HTX was stood up as a statutory board on 1 December 2019.

HTX runs what he calls “a cradle to grave operation”, drawing in all the science and tech talent and projects of all the different departments under one roof. He is thus grateful to the Heads of Home Team Departments for putting their faith in his fledgling agency.

Chan, a French-trained engineer with almost two decades of working experience in technology and ops-technology roles in the Home Team, is concurrently Deputy Secretary (Development) at the Ministry of Home Affairs Headquarters.

Following is an edited transcript¹ of the *Journal's* interview with CE Chan Tsan:

STANDING UP HTX

“DEAL WITH A FEW OF OUR BUGBEARS”

What was your brief and how difficult was it to go about staffing a new agency that essentially involved “poaching” manpower and portfolios from existing Home Team Departments?

HTX is one year old but the journey to get us here started before that. You would have heard of Home Team Transformation. It was started by then Permanent Secretary of Home Affairs Leo Yip in 2015, to get the Home Team Departments to think about what the future would be like in 2025 and beyond, and how we need to transform ourselves to transform the way we work in order to be effective in future.

A lot of the strategies that came out of this Home Team Transformation exercise centred around science and technology. It was already very clear to the Home Team that science and technology was going to feature a lot in whatever they do. And this was in 2015.

But what hadn't really been crystallised at that stage was “how”. How were we going to build this capability? How were we going to change the way we look at technology, the way we look at capability development in the Home Team in order to achieve those gains?

We had sort of an idea that we had to change the way that the Home Team was doing its capability development. Back then, it was very silo, siloed if there is such a word. Each Home Team Department had its own technology department. They all did their own thing with some high-level coordination at MHQ level.

The idea to form a dedicated S&T agency became more concrete in late 2017 after Prime Minister visited Tuas Checkpoint. It was basically a visit to the Home Team to look at how we used technology. And he said the Home Team should be doing more, we should be looking at building

our own capacity, our own organisation, our own organic capabilities. I think he stopped short of saying, set up a Stat Board. But he sort of gave his support for us to really look at it very differently.

I came into the picture early part of 2018. PS Pang Kin Keong and then 2PS Lai Chung Han approached me to come and take on this job.

My brief was extremely simple. It's basically “deal with a few bugbears”. There were a few pet peeves and bugbears, a few things that we thought, the both of them thought, we could change. One of which was that it was taking too long for us to implement projects to deliver capabilities. The whole cycle was just too long, and we must do something radically different to change it. And second was this thing – working in silos. It's sub-optimal. We had made significant investments in S&T personnel but because they were all spread out, they were doing similar things, but in different Home Team Departments, and not always talking to each other. These were two of the things that the PSs wanted to change.

So, my brief was to re-organise the whole thing.

I would say the journey towards HTX started end 2017, and we launched December 2019. I came in at the halfway mark in January 2019. So I would say, a lot of the work, a lot of the ground work, very solid foundation had already been laid by the time I came on full-time.

It wasn't easy getting the necessary buy-in to form a stat board. We needed buy-in from three groups. First, the external stakeholders, the WOG [whole-of-government] stakeholders. Because forming a stat board is not so simple. Many people need to say yes. MOF [Ministry of Finance] has to say yes, PSD [Public Service Division] has to say yes. There's this committee on government organisations chaired by then DPM [Deputy Prime Minister] Teo Chee Hean. If you want to form any new government organisation, you have to present a case to the Ministerial Committee on Government Organisation. They have to say yes. So, quite a number of people have to say yes. Then you need to go to Cabinet.

¹ The interview was transcribed by Lim Jing Jing. This transcript has been edited for length and clarity.

I'm very grateful all this was settled by the time I came on board. A lot of heavy-lifting went into it by our own PSs, PS Kin Keong and back then, 2PS Lai Chung Han. They had to move a lot of things, exert their influence. But a lot of it was also made easier because PM said to do it.

Were there naysayers who said, there's already a limited talent pool, why do we need another agency?

There is this analogy that was given to me, that S&T talent in Singapore is scarce, like fruits of a tree, and many people are competing for the same fruits. I prefer to see it differently. I prefer to see it as, in HTX, we now have a chance to grow more fruit trees, to add a different colour to the garden to attract young people to want to join, take up a career in science and tech because we're different. DSTA attracts a certain type of people – the heavy machinery, the weapons, the warfare, the ships and planes. Ours is a bit different. You could say that the tech is not as advanced, not as sophisticated. But ours touches the lives of every Singaporean. It's a lot more relatable. I don't know whether it plays a part; I think it has a certain appeal that is different. Not so hard and so macho.

"A RACE AGAINST TIME"

Beyond external stakeholders, who else did you have to win over?

The second group of stakeholders is very important - our Home Team Departments. I would also say that by the time I came on board, that was also more or less settled by the PSs. We have a team of extremely enlightened Heads of Departments right now in the Home Team. They all saw that in order for the Home Team to move forward, to take us to the next lap, having our own science and tech agency was the right thing to do, even if it meant all of them had to give up something. They gave their full support. So by the time I came, that was already settled. All the Home Team Heads of Departments were all fully involved. There was no resistance whatsoever, they completely bought into this idea that MHA would have a science and tech stat board.

The key thing which I had to do when I came in was the internal part, bringing all the different officers doing science and tech work, who were all across MHA, under one roof. What is the structure to house them? Are we going to unify the scheme of service? A lot of HR, admin, change management to be done. And to form a stat board, you need to go to Parliament, which has to pass the HTX Act. We had 12 months. Well, effectively 11 months since the launch date was to be 1 December.

So I would say the challenge for me and my team was one of a race against time. We had a rough structure, a rough skeleton of what the stat board would look like, as well as a rough organisation structure. But who would fill those boxes? I didn't have a team yet.

It was really a race against time when you compare HTX's formation with the formation of DSTA. I am quite familiar with the formation of DSTA because when I finished my studies in France, in engineering, and came back to serve NS beginning of 1999, I was sent to the Defence Technology Group (what would eventually become DSTA). By then, they had already decided to launch DSTA in 2000. At that point in time, the Defence Technology Group had already been in place many years. This means that by the time they decided to form DSTA, they already had all the different technology groups that were spread out in different parts of Mindef under one Defence Technology Group for many years. And even after they formed DSTA, they didn't immediately change the scheme. I think it was two, three years later that they unified all the schemes in different forces under one roof, the DSTA scheme.

And we were trying to cram everything into 11 months, this mammoth reorganising task. There was a point in time when we weren't sure whether we would make it by 1st December. But we decided we would just get it done.

Six months before the launch, we decided to invite PM. We thought since PM was the one who gave us impetus, it would be a nice story. And to my surprise, PM responded within a day that he was happy to do the launch.

You were also able to do product demos, to show proof of concept?

We had a few things that we did differently. We did a hologram show, a live show on stage with professional actors. It looked like a scene from *Minority Report*; it wouldn't have looked out of place in a Hollywood movie. But what I really liked about it was that the concept was developed by our own staff, every piece of technology you saw in that 10-minute show was something that we were either already working on, or something we had already conceived, had started doing research on. It was a very strong and bold statement of intent of where HTX wants to bring the Home Team. In that 10-minute show, we wanted to give the audience a picture, an image so powerful, so strong of what the Home Team will be like X years from now.

And after the hologram show, we had a tech demo outside, of many of the things we showed in the production, the prototypes. Most of them were not ready for use but you could see where we were heading, the overall direction.

For instance, one of the vehicles that was featured in the hologram show was Xentinel. This is the counter-drone vehicle. The idea is that it's a one-man operated vehicle, with a counter-drone system onboard. If you want to protect a certain area, one police officer can drive the vehicle, park it there, and start the system. Then you have a bubble of protection against drones. That idea was conceived at the beginning of 2019, February/March, and by the launch, 1st December, we showcased the vehicle. It wasn't fully operational. It's still undergoing testing. But it worked.

"WHAT TOOK US SO LONG?"

And the third group you had to persuade?

That third group is the internal stakeholders. Rather, the science and tech officers, the 1,300 officers that ended up in HTX. I would say that, overall, this group was not a difficult sell because to many of them, the feeling was – what took us so long? So that was the feeling I got when I came in and formed the initial team. All raring to go. Let's not waste any time, let's roll up our sleeves, let's get to work.

My job in rallying this group was not that difficult because the mission is clear, the *raison d'être* for HTX is very clear. It sold itself. It's the execution that we had to be mindful of. There were small things, small decisions that we took which, I felt, were appreciated by staff. For instance, the principle that HTX will not leave any men behind. What was difficult was the nitty gritty, the HR [human resource] aspects, the schemes, people calculating, comparing. So those were the parts we had to be careful of.

The HR exercise was massive. First, we had to bring people together, change the schemes for a thousand over officers. The added complexity was that out of these 1,300 officers, about 200 are not even Home Team officers. They're from GovTech, they're from DSTA, seconded, embedded, whatever you call it. So we had to work things out with their parent agencies.

"YOU CANNOT DROP ANY BALLS"

You were taking everyone on board? All the existing science and technology folks? Were they given a choice?

The Home Team has 28,000 officers. We had to identify job by job, which jobs are considered S&T jobs. If at that point in time, you are doing an S&T job, the job goes into HTX, you go to HTX.

If at that point in time you are already on the Home Team Specialist Scheme as an engineer or scientist, that scheme will become the HTX scheme. So, you have no choice. You will be legislatively transferred into HTX.

Where you have a choice is if you're on another scheme, e.g., a HUS [Home Team Uniformed Service] officer. You have a choice whether to convert your scheme. You can choose not to convert your scheme, to carry on as HUS and continue to be seconded to HTX, until such time that secondment ends. Or you can choose to convert to HTX scheme. The choice is yours. I will not look at your CV, look at your CEP and start picking and choosing who I want if you don't want to go back to your Home Team Department. So that was one of the first principles we adopted very early on.

The instruction or brief given to us by my bosses was, “you cannot drop any balls”. In transitioning all these people, all these projects, all these assets – in the process, you cannot drop any balls. So “no balls dropped” became our mantra. We went to every Home Team Department to meet all the HODs [Heads of Departments], and told them we are now going to take over all these projects, all the officers, all these assets, but I promise you I won’t drop any balls in the process. So that was another massive challenge. I’ve described it as trying to overhaul a car engine when the car is moving. Or performing heart surgery when the patient refuses to lie down. It’s a very delicate task trying to re-engineer the whole thing but the machine cannot stop running.

“EVERYBODY HAS TO LEAVE THEIR EGOS AT THE DOOR”

You’ve alluded to the work that is done in HTX as breaking out of siloes. But when you break out of siloes, you inevitably trample on egos. How do you find the balance? What do you tell your own officers?

There is this quote which I’ve borrowed from DPM Teo. I can’t remember on what occasion he said it, but it’s in relation to us forming this stat board. He said that to do this massive restructuring and for it to succeed, “everybody has to leave their egos at the door”.

I remember I borrowed this quote the first time I gathered the HTX leadership team for a retreat at SPOM [Senior Police Officers Mess]. I had spent about two months identifying and interviewing all these people I could appoint as directors. What I call my leadership team are directors and above, about 30 of them. So I borrowed this quote from DPM: Doesn’t matter what you were before this, who your boss was before this, but for us to succeed, for HTX to succeed, everybody here has to leave your egos at the door, including myself.

“NOW THE INDUSTRIES SIT UP AND LISTEN TO US”

The HTX vision statement is “Exponentially impacting Singapore’s safety and security”. Can you explain that in layman’s terms?

It’s quite simple. We want to use science and technology – that’s implicit – to impact Singapore’s safety and security. It’s also implicit that it’s positive impact. And the only term that needs explanation, I suppose, is exponential. So what is exponential versus linear?

Imagine you’re running on a treadmill. If the treadmill is set to linear, the speed increases gradually until you can’t cope at some point. Usually you will have some time to react when you realize the speed is going too fast. At exponential speed you need to increase your pace multiple times every second. The treadmill will suddenly go so fast you will not have time to react.

So where I see HTX is, we want to bring that impact. We want to leverage science and tech to help the Home Team officer running on the treadmill to stay on the treadmill even if it goes exponential. And the only way to do it is if he or she has the tech support, tech capabilities to help him or her to be many times more effective than just one person. If one becomes two, two becomes four, four becomes eight, then quickly, the capabilities of the Home Team become way beyond the 28,000 people that we have, many times more.

Do the Home Team Departments come to you with problems and say, find me a solution? Is it a two-way process, or is it you saying “there’s this technology we want to work on that we think will help you?”

Yes, the idea is we want it to be a lot more two-way. In the past before it was HTX, things were a lot more one-way – ops pull. Ops pull is when the ops user comes with the tech and says, I have a problem, I need this to solve the problem, can you go and buy this for me to solve the problem, while I develop whatever it is. Tech push is the other way, tech push is the tech people know roughly what kind of problems you are facing today, what are some of the problems you are likely to face tomorrow, and then proactively offer solutions, offer suggestions on what kind of tech would be useful to you.

With the formation of HTX, the idea is we want to have more tech push. In the past, with tech being



departments within HTDs, some even within the ops departments, a lot of it was, “the ops tell me to do this, then I do this.” We want that to change a bit as we balance; sometimes there is a bit of tension, ops pull and tech push.

How do your people find out about new technologies out there? Do they sit and dream about these or do you send them out to visit other agencies?

Certainly, going outside to see what’s being done is a very, very big part of what we do. And one of the advantages of forming a science and tech stat board like HTX is that you consolidate the entire demand of the entire Home Team. When my people, let’s say if you are from the Robotics, Automation and Unmanned Systems Centre of Expertise, when you go around to talk to partners,

industry partners, international partners, we’re not just talking about robotics for police, we’re not just talking about robotics for SCDF, but the entire Home Team. The demand becomes aggregated, it becomes a lot more substantive, and the industries sit up and listen to us.

What we’ve done is, we’ve created 15 Centres of Expertise. We want to hone the growth. We want to make us deep specialists, specialists in forensics, specialists in data science, specialists in cybersecurity. So when we talk to Home Team Departments, when we talk to industry, we carry a lot more weight because these are experts in the programme that we’re starting to build.

We didn’t start from scratch. Before we started HTX, there were already pockets of these

expertise around. We brought them together, then we invested more in them.

IMPACT OF COVID-19

“WE HAD THE OPPORTUNITY TO LIVE OUT OUR MISSION IN A MORE VIVID MANNER”

Was it fortuitous then, that HTX had already been set up when the COVID-19 pandemic hit Singapore?

This is an interesting take on it. I guess it depends on whether you look at the glass half-full or half-empty. We launched HTX 1st December 2019. And then, in January – Virus in Wuhan.

A lot of our plans went haywire. We had a lot of plans to do townhalls, culture building, bringing people together, activities, healthy lifestyle – all down the drain. All could not be done. So the glass half-empty part would be that a lot of our plans were disrupted.

But the glass half-full part, which I think now in reflection, I would agree that it was fortuitous because without COVID, we wouldn't have been able to do a lot of things. We wouldn't have been able to stand up a lot of operations, capabilities. We wouldn't have had the opportunity to contribute at a much higher level. So we stood up testing for COVID-19 at the checkpoints, the borders, when people started coming back from overseas. That was completely something new for the Home Team.

We've always had labs at the checkpoints, but we never did human testing. But because of COVID, there was a need and we rose to the occasion. Today, our lab is certified by MOH [Ministry of Health]. We wouldn't have had the opportunity to do all these things, we wouldn't have had the opportunity to deploy robots in dorms, and fly drones to support Police operations, to implement the e-wrist band – for ICA to enforce Stay Home Notice. We wouldn't have had the opportunity to live out our mission, to force-multiply the Home Team in such a vivid and in-your-face manner.

So, in hindsight, maybe it was a good thing that HTX was formed just before COVID. If not, I would imagine it would have been a lot more difficult for the Home Team Departments to pull this off

together because the resources would have been spread out all over the place.

Has COVID-19 changed your vision for HTX? It has changed your trajectory. Has it changed your vision?

I would say it hasn't changed our vision. In fact, it has made it even more – how would I say it? – more real. It's re-affirmed that this is the vision that we need to pursue.

I give you one example. ICA's New Clearance Concept. All this was conceived before COVID. And the idea is that we want a future where people travelling in and out of Singapore can breeze through immigration. No need to take out passport. Don't even need to stop, just walk through the gantries. The sensors, the systems, the intelligence, the AI will take readings of that person, and be able to tell us what's the threat level – high, medium, low, whatever it is – and then allocate the appropriate response. That will mean, let the person pass, or assign an immigration officer to speak to the person. All this was conceived pre-COVID.

Post-COVID, it tells us that our vision is correct, because now everything needs to be contact-free and automated. If anything, COVID really confirms even more that this is an evolution for MHA. If anything, we'll work even harder to get this right.

“GATHER 1,000 PEOPLE ONLINE FOR A TOWNHALL?”

What about the building of your organisational culture, given the disruption in workflows that COVID has created? How are you going about building an organisational culture?

This is one of the things that's really been disrupted a fair bit. We were planning to do townhalls, something like three major townhalls where we bring all these shared offices together. What is ironical is that because of COVID, we have done even more – at least one per month. Some months we had two townhalls. And on a scale that we didn't imagine was possible. Gather 1,000 people online for a townhall? It's not that we didn't know it was possible, it just wasn't done. You think of townhall,

you think of, you know, gather people, must have makan, and it's a live show.

The first townhall we did was from my own house. I borrowed my son's bedroom, changed the backdrop, took down his Iron Man and Spiderman posters – my wife helped.

So in a way, COVID forced us to do things differently. I must say again, it was a good thing that came out of it. And we realised then that engagement is very important, especially when you have a crisis to cope with, and officers are uncertain – to be able to hold up the phone, to see management, to hear from management regularly.

What do you say to your people in the townhalls? Are these for solving problems, or are these about "how are you"?

The first few were very much about COVID. How to cope with the circuit breaker and because we are essential services, some of the officers had to continue working on the ground. For them, it was about giving them assurance that their needs would be taken care of and they can carry on working in a safe manner. Whatever you need on the ground, let us know, we will see to those needs. And then to those who are forced to work from home, it was about giving them the support that they need, rallying people around because not everybody has an easy time working from home. Like myself. I have four young kids at home, so I know it is a challenge.

Then when we were out of the circuit breaker, people wanted to know, can I go back to work? Can I not go back to work? Then subsequently we moved on, to talk about organisational things, about building HTX, even about coming to our new home [Mediacorp Campus]. We did a poll, asked officers what kind of breakout rooms they want. Some of the designs came out of a competition. We had ten or twelve different ideas and we got officers to vote on what they want to see in the breakout rooms. We did things like that. It helps build that sense of belonging, that sense of ownership in HTX. All this was done virtually, that's why I would say without COVID, we wouldn't have done that. And because of COVID, all these online tools became part and parcel of our everyday life. And we were able to use them quite effectively because every month we have a townhall.

"WE TAKE CARE OF TECH CRADLE TO GRAVE"

What about HTX and its work are you most proud of?

I would say a few things. One is the "no balls dropped" part. I'm quite proud of the way we handled the transition, that we brought everybody, all the projects, systems in. I still remember some of these numbers because at the first anniversary, I had to give a speech.

Today we manage, I think, it's 850 projects all across the different Home Team Departments. About 850 projects, 270 properties. They're all under HTX's care.

270 properties.

Properties. Building and infrastructure properties. Police stations, division HQs, the ICA Building, all the building infrastructure, Ministry HQ maintenance. All taken care of by HTX.

A few thousand vehicles and vessels, tens of thousands of ICT devices, computers, laptops, phones. Three hundred ICT systems.

It's a huge responsibility that we've undertaken and I'm quite proud of the fact that we've done this in one year, brought all this under our wing. And there's not been any perceived drop in level of support. Many areas I think we've done better than before.

So you're telling me that the iPads issued by HTA, for instance, are supported by HTX. You're responsible for their procurement and maintenance.

Procurement, maintenance. If you see a police vehicle breakdown on the road, there's help on the way.

That doesn't sound very sexy.

(Laughs) No. It's not. So that's the thing about HTX. We don't just do the sexy bits of the work. We take care of technology from cradle to grave, literally. We're not just the ones that play with toys and then leave you the toy. Once you play with the toy, we sell you the concept, and then develop it into a full use, full-fledged solution that works, not only works, but it doesn't break down. And if it breaks down, we're the ones who

will come in and fix it for you. So it's really cradle to grave, end to end, whatever you call it.

It's a huge responsibility that we don't take lightly, whether it's the sexier bits of the work, or the completely unsexy part. We take every node in the chain, the entire chain, entire lifecycle, as seriously as we ought to because it's really about keeping lights on, keeping the Home Team running 24 by 7. It's a huge responsibility. I'm quite proud that we have handled the transition in one year. I would say very well.

Second achievement is our growth. We have grown a fair bit. So despite COVID, or maybe thanks to COVID, I'm not sure, we have grown significantly. We recruited 260 staff in 2020. So that is quite a significant number. And we only really ramped up four, five months ago, because when we first formed HTX, our HR team was so small, we had to first grow the HR team before it could start operating at an optimum level. But since four, five months ago, we ramped up and we're recruiting today at a rate of about one new officer per day. That's quite phenomenal. And I'm quite heartened when I do recruitment interviews that people do recognise the value proposition that HTX has.

I think what makes us unique and compelling, I would summarise in three things. One is our mission. People find it very meaningful that they have an opportunity to contribute to the safety and security of Singapore in a very tangible way. Two, the science and tech work that we do is impactful. Impactful in the sense that it's work that you do and you see, you see it serving the needs of Singaporeans, you see it serving the needs of policemen, the fire-fighters, etc. It's about saving lives, it's about solving crime, securing our borders. These are things that people identify with and they, jobseekers, like the fact that I can come in and do these things, I can see the impact. And the third, the third thing I would say is that they are attracted that we are new, that we're a stat board but we're almost like a start-up stat board like no other. So that's an attraction to some who prefer joining an establishment that's a lot more stable, established, but for some, especially the younger ones, they see that it's exciting, it's new. It's a chance to be part of something new. I find it encouraging.

GROWING TALENT AND GROOMING LEADERS

"ARE THE EMCEES REALLY ENGINEERS?"

Do you meet every new recruit? Interview every applicant you want to recruit?

Not every single person. I interview typically those of a certain seniority and also fresh grads.

We started what we call the HTX Science and Tech Associate Programme. This is where we select, we recruit fresh grads, typically those better performing ones, high potential ones. I interview every single one of them. The idea is we want to groom the next generation of science and tech leaders of the Home Team. And when they come in, we typically send them into different areas depending on what field they are studying. We will stretch them; they will not just do technical work. We will get them to do all sorts of things, such as organising the recent anniversary event, or even last year, the launch event. We started recruiting associates in 2019, so all 20 of them were handling lots of things. Planning for seating, where to put PM, where to put SM. I thought it would be quite fun for a fresh grad to do something like that. Our event emcees were associates. Fresh out of school – I think they joined us in July. They did so well that friends in the audience asked, "These are engineers? Real or fake ones? They're engineers or they're emcees?" They are real engineers. Amazing young people.

I count this as one of the achievements as well – how the team has come together. It was barely one year ago that we came from all over the Home Team to form HTX. A thousand three hundred people. You could say similar DNA because all Home Team, but yet different. You know the Home Team Departments – they have sub-cultures, sub-DNAs, they're all slightly different.

So, to see all those people come together, work together as a team, it was very gratifying. And one particular instance – this was I think, April, March, when the borders were still open and many of our students studying overseas, in the US, UK, were flooding back. And all these people when they landed in Singapore, we would test them for COVID. Our lab team was very, very stretched, because our lab is in Pasir Panjang but the samples were coming in from

HTX Leadership DNA – IDEAL



Changi Airport, some from Woodlands. We needed people to run all over the place to collect them. They were overwhelmed. We did a call for volunteers. I was very gratified to see 60 HTX officers from all across HTX, coming together to volunteer their own free time. And these were 24/7 operations, so some of them volunteered to do night duty and the next day, they went back to work. That was amazing bonding, to see this group of people rallying behind the team, rallying behind the mission. I thought it was fantastic.

THE IDEAL QUALITIES OF LEADERS

In grooming future leaders, recruiting future leaders for HTX, what are the qualities you look for?

We've spent a fair bit of time thinking through the values we want to see in our future leaders. The HTX leadership team worked a fair bit with the HR team, and we came up with a framework we summarised into five letters: I-D-E-A-L. IDEAL.

Each letter represents a quality. So "I" stands for inspire, "D" is dare to try, "E" is empathise, "A" is aim high, "L" is always learning. We came up with this by asking ourselves what we want to see in our leaders.

We have four layers of hierarchy. So, the total universe of people with supervisory responsibilities – about 400ish. The kind of qualities we want to see in them, and therefore the kind of qualities we want to see percolate down to HTX officers and their future leaders, are summarised in these five qualities.

The way to understand these five qualities is not from the leader's perspective but from the officer's. For instance, inspiring – it's not about how inspiring the leader is in terms of oratory skills but how inspired the staff are themselves. How inspired

they are to exceed expectations, to always do their best, to give their all. These are what we want to see our leaders build. Each of these qualities has specific meanings. "Dare to try" is something that we think is very, very important for a science and tech agency. In fact, I think it's something that is the most important piece we want to build in terms of culture. We want to build a culture whereby every HTX officer isn't afraid to speak up, isn't afraid to offer a suggestion, offer an idea, offer a new way of doing things, to not be afraid to try. And trying means maybe you fail. So dare to try, dare to fail.

So please don't come to me and then expect that I have all the answers. No. I need all of you to contribute, to tell me blind spots I may not have thought of. And that's part of the challenge, and I think it's a process.

It's the culture I want to build in HTX. Every officer has their own value to add, especially when it comes to science and tech, things that are very, very specialised.

Do you feel that your career has prepared you for this job?

I think I'm quite fortunate in that at a very early stage in my career, I had the opportunity to lead people. And I had really good role models, bosses who gave me very good advice. In my second year in a Home Team Department, my boss K made me what we call section head of a new team. And then third year into the job, he made me concurrent head of another section. This time I had 30-plus people in the team. I'll always remember two lessons K told me when I first became a supervisor. One is what he called ABC of leadership. He didn't even teach me. He just chucked me articles and said, "You go and read and figure it out by yourself." It is actually exceedingly simple. One article was

about the difference between a manager and a leader. A manager is someone who comes to work every day, brings the team from point A to point B because that is the task that is given to the manager. So every day, he does the necessary. But if you want to be a leader, you've got to go beyond that and think about C, beyond point B. You'd better think how to get from A to B faster, to get from A to B the next day and bring the team to C. One of my early lessons.

Second lesson is equally valuable. K told me that to be a leader, sometimes it's not about talking. It's equally important to sometimes shut your mouth and listen to what your staff tells you. So, I do feel that in a way, I had this preparation to lead the team to C. I saw it as lessons that I learnt to manage teams, to manage people, which I find relevant even today.

In a way, I always thought I was fortunate I had this grounding where I do different types of operational work, staffing work, engineering work. Good mix of different things.

Would you call yourself a technologist, rather than a technocrat?

I was trained as an engineer, but I don't actually consider myself a technologist. If you ask me the nitty gritty details of technology, I'm really not into that space. I've said this many times to my staff – you cannot expect me to know more about your field than you.

I still think of myself as an engineer, but not in a very technical sense of the word. I explained this to my staff at one of the townhalls. Engineer – if you look at the word engineer, it comes from Latin. Its two root words are ingenious, and engender. Meaning engineer – you are ingenious, creator of solutions, so in a way, you are an ingenious problem solver. So that's kind of how I think of myself, as someone who can come up with ideas and solve problems, not necessarily do things myself. And my job here in HTX, I've also described this to my staff before, that I see myself as a chief enabler. CE can stand for chief enabler. I'm here to enable, to enable them to succeed, to remove obstacles. The job of a leader is to grow his people. So that's the way I see myself.

“SUCCESS IS NOT ABOUT WHO HAS THE BEST TECHNOLOGY BUT WHO USES TECHNOLOGY BEST”

Can someone without a science and engineering background run HTX?

I think S&T background will help but it's not really necessary. I think what's equally important, or maybe even more important than this is an understanding of ops tech. MHA – we are a very operational Ministry. We're not really into science and tech research for research's sake. It's really about use of technology. I believe success is not really about who has the best technology, but who uses technology best. I like to quote this example of Apple. Apple is so successful in making the iPhone, the iPod, iPad. Did they invent all this technology? They did not. The tablet was there before. The touchscreen phone – somebody else came up with that. So, it's really not about the best tech, but what Apple was able to do was package it in an attractive and usable form. The design of it, the concept of operations – in our parlance, the CONOPS. You want to design something that even the user doesn't imagine that he needs it. But the minute you produce it, you make it, you invent it, you put it in front of him, he goes, “why didn't I think of it?”

So, whether you really need somebody with a very strong engineering background? Maybe, maybe not. I won't say it's a must but a very good understanding of tech, ops tech, is important.

WOMEN IN STEM

“WE BRING SOMETHING DIFFERENT TO THE TABLE”

You said earlier that the appeal of HTX is that it's not so macho.

I thought it was interesting that of the five PSC [Public Service Commission] scholars we have, four of them are women.

If you look at our statistics, the staffing statistics, the overall population of HTX, unsurprisingly, is about 60-40 male to female. So more males than females. But below the age of 30, the percentages

are flipped. So I do think that we bring something different to the table.

Globally there are fewer women in STEM. Does HTX feel a special responsibility to encourage women to join its workforce and to groom them for leadership positions?

I don't know whether I would call it a special responsibility. But maybe if we can attract more young girls to study, to consider a career in S&T, then it would be a space for HTX to be able to contribute in.

Four of the 15 members of the HTX Board of Directors are women.

We wanted diversity in our board – a diverse spread of experiences. The guidance from Minister was to have a board that is not overly heavy on government officials. And because we needed to put in five Heads of Departments – that is vitally important, because they are the key stakeholders for us – then plus myself and chairman, PS Chew Hock Yong, that's already seven.

Then with Minister's guidance, we went about looking for private sector people with diverse experiences that value add, to give different opinions to the board. So that's how we landed with our directors. As it happened, a good number are women.

HARD CHOICES

“THE THINGS THAT WE DO OURSELVES, WE CAN BE A BIT BOLDER”

What are the hard choices you've had to make?

They are usually to do with people – redeployments to ensure better job fit. Not always pleasant, or easy, but these are things I've had to do.

My other hard choices have to do with balancing. I've talked about how difficult it is trying to overhaul the engine while it's moving. The easiest way to make sure you don't drop balls is to keep everything status quo. So, you take all the Home Team Departments, bring them to HTX, you change the branding, you change the uniform,

change the lanyard but you keep them where they are, supporting Home Team Departments, don't touch anything. Sure, balls won't drop. But it also means you're not creating synergy, you're not changing anything.

So that is my balancing act every day. The decisions that come up – we know we have to change, we know we have to change fast. But I also know that if I change too fast, balls start dropping. It's always a balance when to let go, when not to let go, when to insist, “No, this one must change, go back to drawing board and come and show me a better way of doing things, a more synergistic, a more manpower efficient way.” Or to close one eye, close two eyes, and say, “Ok lah, this one, in the interest of moving forward, we go.”

Almost on a daily basis we are looking at decisions like this, and I'm grateful that these are discussions, conversations that I can have openly with my leadership team. They understand and we take decisions as a collective group.

“No balls dropped” also suggests you're not allowed to have failures, which kind of contradicts what you're trying to do.

Yeah, so it depends. Fail, fail in what, fail how big. There are certain things that cannot fail.

Like what? What cannot fail?

For instance, the flagship programmes. These are huge, mega programmes, billions of dollars involved.

Every Department has at least one flagship programme?

At least one.

But when these projects came to you, maybe the departments had been working on them for a while?

They were at different stages of implementation and conceptualisation. Some were half-cooked, none were completed, some were halfway through implementation, some were still gathering ingredients – they're in different stages. I would

consider those as “cannot fail”. But in many other things, new CONOPS, new solutions, new prototypes, new ways of doing things – those that we do ourselves, we can be a bit bolder, be a bit more experimental.

“I WORRY ABOUT MISSING WEAK SIGNALS”

What keeps you up awake at night?

Actually, nothing keeps me awake.

That’s what all of you say. How is that possible?

The honest truth is I have no problems sleeping, and partly it’s to do with my personal philosophy that everything that I do, I can only do my best and whether I succeed or fail, I have given my best. I remember this concept that was taught to me when I went for a course in Israel. They call it professional optimism. I thought that was a very valuable concept; anything can go wrong, especially in operational work. Your job is to minimise the percentage of failure. You cannot guarantee your boss that 100 per cent you will succeed. Sometimes you can, but very rarely. So, I always believe that, I know I can only do my best. My best means that I make sure that everything I do, I cover all angles. If something fails, higher force conspires against me, and if it fails, it fails. What can I do?

Man proposes, God disposes.

(Laughs.) That’s what I mean. But I would say – it’s not that nothing troubles me, but what bothers me typically are the large, structural things. We’re not done evolving HTX. We’re not done reorganising our resources. I talked about gathering the Home Team Departments’ science and tech resources. It’s not optimal yet, the way we are organised. I won’t say it worries me, but that’s on my mind a fair bit.

I worry about missing weak signals, things that are happening on the ground, signals that I see or don’t see. Cracks that are appearing that I didn’t see because it’s fog of war, and I’m in the cockpit of the ship, I can’t be everywhere? These are things that worry me.

“I WOULD FOCUS MORE ENERGY LOOKING AT PRINCIPLES, VALUES”

What is more important to you, being an effective leader or a moral leader?

I think you really have to be both. The public service generally is quite good at producing effective people. So that usually is a given for senior people. I would say that in my position as CE, if I want to groom the next generation of leaders, I would pay more attention to the second part. Maybe moral is not the right word. When you talk about morals, basically you’re talking about values. I would maybe focus more energy looking at principles, the values, which are not so easy to suss out. This is something that I think going forward, I may have to pay more attention to.

What is your personal story?

My personal story? In a lot of my dealings, discussions, I don’t really like to talk about myself. I would really rather the story be about HTX. I feel that while I’m here, my job mainly is to rally people, not around me, but around the cause, around the cause of HTX, around the organisation. The values, the culture, the loyalty, the sense of dedication and commitment – it has to be to the organisation, and not to me personally.

I have a story, but I’m not so sure it’s really the most important thing. The most important thing is the story of HTX, the why of HTX, the work that we do, how we want HTX to inspire our employees to give their best.

What is your personal mantra?

I quite like this quote from Dwight Eisenhower, which goes something like, “Leadership is the art of making someone do what you want done because he wants to do it.” It’s about inspiring them to want to do things because they want to do it. It’s an idea that when people are inspired, they give more, they give more of themselves to do their best. And how do you get them inspired? It’s more effective when it comes from within, rather than being pushed, rather than being motivated by an external force.