Edited Notes of Chat Channel

Patrick: None of the case study cafes will be recorded but feel free to make notes in the chat channel which we will make available afterwards.

## COUNTRY FIRE AUTHORITY CASE STUDY

Stuart: climate is hot and dry in summer, and wet winters with growth, produces a lot of fuel for fires, so very fire prone. CFA is a volunteer agency, no payment at all, structured around local brigades across the state. There is significant risk in losing knowledge as volunteer firefighters retire. Knowledge is not just about training, it's also about the experience they pick up in call outs. Firefighters learn on the fly and grow as they go. The Age Graph shows a trend towards higher average ages over the past decade. The aging demographic is matched by an increase in younger demographics, but the drop off at higher age end of the graph is very rapid.
Some people have expertise in certain types of fires - people are used to calling on them, what happens when they leave? Brigades can collapse very quickly if key people leave. Swathes of fire brigade members could leave at about the same time, leaving the fire brigades vulnerable. CFA is starting to measure the knowledge that is built up in the brigades - skills and experience. Now they can observe trends and predict where knowledge loss is likely to occur to prevent or mitigate it.

CFA also has initiatives on expert locators system to connect people to people, and a Knowledge Asset Management System (KAMS) based on Ron Young's methodology.

There is great knowledge sharing on local level - but larger scale knowledge sharing is not great especially at the state level.

GROUP DISCUSSIONS

Arief: Questions:
1. How was the knowledge and expertise identification done? Was there a specific method?
2. Did HR assist in the expertise identification?

MOTIVATION TO SHARE

Lyn: Our group discussed ways to reward knowledge sharing and I mentioned Dan Pink's book Drive - have you seen this animated overview? https://www.youtube.com/watch?v=u6XAPnuFjJc

Meena: Great chat with Lyn who shared her work on gamification activities/ experience to engage users.

GEETA: How did you get the buy-in for people to share their experiences? Especially when they spend so much time on the road.

Edgar: Do you have to deal with experienced firefighters who are reluctant to share? How do you deal with the reluctance?


Stuart: We are trying to move from a push to a pull focus. Pull focus is when you have a person in the field with a question seeking an answer. How do we support that? Thinking about a teasers strategy, publish posts with snappy headlines like Facebook… people can do a quick scan to register it is there, and if they have a need later on they can come back and read the details.

Azlinayati: That is what we do, we publish knowledge briefs - snapshots with links back to the original articles.

Lyn : it's interesting that in the workplace environment "we" demand to be trained and then at home we will go find the guide to learn new things eg via YouTube - have you found the same thing?

Lyn: Gamification and motivation - acknowledging mastery encourages participants to share knowledge; encouraging people to use the system while teaching them to use the system.

Stuart: the age profile is an issue - older volunteers who don't like to use technology. However one benefit of the pandemic has been that a lot of people have been forced to go digital and now appreciate it and can see that it is a way they can get their voices heard "higher up".


SHARING TACIT KNOWLEDGE


Edgar: How does CFA capture tacit knowledge?

Stuart: Our culture is as Dave Snowden describes it: people don't know what they know until they need to know it, they won't invest in sharing if they can't see its going to be used. If they can see a need they will share very willingly. That's why face to face/ people to people sharing predominates over using systems. An example: Stuart was called out to a restaurant fire a few weeks back. Two firefighters fell through the cover of a grease pit that was surrounded by flames, first one, then the other following him. Very dangerous - nobody was hurt, fortunately. After the blaze

was put out, the second firefighter to fall walked Stuart through the situation afterwards - how he would approach the fire, what the conditions were, what he would do.. very visceral. How do we get these snapshots communicated to the firefighters? He's teaching me because one day that might save his life.

Lyn: Could you use phone footage from locals?

Meena: Is that because the fire fighting aspect is almost heroic and for the greater good?

RajaNadia: How do you capture and transfer knowledge, especially tacit knowledge? (training/ buddy system/job shadowing, learn from experience).

Stuart: Not a fan of the SECI model. What SECI describes as tacit is really implicit knowledge - stuff that can be converted into explicit form. But real tacit knowledge you can't convert, at best you can take a snapshot. For tacit knowledge transfer it is much better to connect people with people.

Stuart: We do training sessions based on scenarios. That's one way of doing it. We work the lessons and past experiences into those training scenarios.

Arief: Would AAR be a useful tool for the firefighters?

Stuart: We also have issues with creating artefacts like videos. The culture is very hierarchical and safety oriented so knowledge captured down the line can't be published unless it is approved by the Chief. This results in two cultures, we have a formal sharing culture and an informal one - "black market of ideas".

Patrick: Perhaps the barrier between these two knowledge "markets" is not something to be broken down, but the approach could be to serve both "markets" both formal and informal in parallel.


KNOWLEDGE ASSET MANAGEMENT

Murni & Edgar: Pls share more about the KAMS approach.. How do you encourage people to share, reuse knowledge from there and make the practice sustainable?

Stuart: KAM - knowledge asset management Ron Young's approach. It looks at how you set up the infrastructure and rules for how knowledge is to be managed. Assets are the generators of knowledge and the systems for how it is distributed and made accessible e.g. Knowledge bases, CoPs, intranets etc. Knowledge Assets can be human, infrastructure, market assets (e.g. relationships, networks). So KAMS does not go down to the level of individual knowledge artefacts.

Assets are measurable and tangible - this is very suitable for an asset conscious organisation like CFA - tangible measures to report to the board.

FIRE PREVENTION AND LEARNING

Bill: Are the volunteers paid in any way? (No)
Is there a mandatory retirement age for volunteers. (No)

Bill: Has anyone assessed Victoria's firefighting effectiveness against California, Spain etc?

Stuart: There is a close relationship between Victorian and Californian firefighters we do exchanges during our respective fire seasons. Key difference is that US firefighters are paid, and Victorian firefighters are not.

Bill: When firefighters are paid they are not paid for fire prevention.

Stuart: Fire prevention in Victoria is becoming more complex because of climate change - it is not enough now to simply manage forests - because of the effects of climate change, there can be cases where controlled burns do not prevent the forest from burning a second time.

Patrick: This is also a knowledge and an organisational learning issue, if old methods no longer work. Requires greater agility and adaptiveness in learning

Stuart: Yes, and CFA is looking at this, all the way from training into policy work.


PETRONAS CASE STUDY


MASK METHOD VS. KNOWLEDGE AUDIT / KNOWLEDGE MAPPING

Bill: We know Petronas had a robust knowledge audit/ knowledge mapping methodology as part of their corporate KM programme. Why did Petronos use the MASK methodology when it could have used the knowledge audit methodology?

Murni: Knowledge mapping is a very common methodology in PETRONAS to identify knowledge resources. It is useful to figure out what we have and what we need to do. It works best at the operational knowledge level. MASK focuses on the strategic knowledge level, high level capabilities for the business. GNE is a new business and new within the pandemic - we needed something that would get to strategic issues very quickly linked to the business targets and business challenges.

Murni: We were asked "Cast the net so that we know what the issues are that we need to manage".

Murni: We looked at the methodologies we use, but knowledge mapping requires in depth engagements with the business units very systematically. Within GNE some of the businesses are very new, they may not even have mature business activities/processes in place to map.

Murni: Remote working in the pandemic was also an issue - we need technology to do the work
PETRONAS does knowledge mapping in face to face workshops.

Patrick: we have adapted the methodology to conduct it remotely.

## MOTIVATION TO SHARE

Meena: MASK method - do SMEs respond positively to the interviews? Are they mandated to do so? Maybe they don't want to share some key information? Analysing and structuring - what is the structuring bit? Does it refer to capturing and codifying knowledge?

Syed: We get a varied reception from the subject matter experts - we have to understand their appetite and sensitivities first. Some want sessions with colleagues/peers rather than superiors. So we have that initial conversation to set their comfort levels.

In terms of where we are, we started in Q1 this year - now we are analysing the results from the interviews and designing interventions. "Structuring" means we are structuring the insights from the structured interviews. Structuring is in relation to business targets.

## STRATEGIC KNOWLEDGE

Arief: Was there a specific anchor such as business pain points, or innovation that guided the knowledge identification interviews?

Syed: One of our challenges was to get management buy in - KM has been around in PETRONAS for a long time different schools of thoughts about what KM is. So we had to get through that. Tying to business targets is an important part of that.

Murni: MASK is also useful because you start with the senior management, makes the job easier, and you frame everything in terms of business targets.

Patrick: This is what Nick Milton describes as "strategic knowledge ares".

Arief: when you identify strategic knowledge, how do you measure/track this new approach back to measurable results and shows outcomes?

Syed: We are an engineering culture: "Data speaks louder than words". We map the data from the interviews to business results.

Suhana: That is what we do in the Analyse phase. The output of the exercise needs to be acceptable to the business - then we do use the Wheel of Knowledge to break

down the interventions - e.g. documents, methods/ processes, skills/competencies, etc. The interventions are not always by KM themselves - sometimes the intervention might be by HR, we have collaborations with other departments eg HR (using other data like cultural surveys), Change Management, Marketing, Commercial.

Syed: Interventions may not look like typical generic KM interventions - they are very fit for purpose.

Lucky: We discussed how knowledge is mapped back to the business processes, and use taxonomy to connect users with the knowledge they need.