

ISKO Singapore: Scenarios, Futures, and Knowledge Management – with Gary Klein, Matt Finch and Susann Roth
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Session Notes (edited)

Gary: people can be dogged in holding on to what has worked in the past - but also realise that the future is becoming more and more unknowable. One solution is “resilience engineering” - but to do that you create redundancy and inefficiencies. A better approach : strengthen the team’s capabilities and help them to build better mental models to cope with future uncertainty.

Matt: Classic book on scenarios by Kees van der Heijden takes a participatory, dialogue based approach <https://www.wiley.com/en-gb/Scenarios:+The+Art+of+Strategic+Conversation,+2nd+Edition-p-9780470023686>

Matt: What can we know about things that haven’t happened yet? Think about the questions we would ask a crystal ball, and extrapolate to multiple visions of the future that tell us about our visions and expectations. This helps us to understand our own frames and assumptions by engaging with our questions about the future. They reveal the uncertainties of the here and now, emerging elements, blind spots.

Derek: Context is king - knowing where scenarios land in terms of their complexity domain is important to how we respond. Understanding the present to then seek and understand the dispositional states and attractors (complex dynamic adaptive systems science). I don't believe we can "know where the future is" and "how we get there" even if we present multiple conical horizons. I challenge Matthew to predict the causality of a future event.

Matt: We can generate multiple versions of how things can play out - but to what extent do our mindsets about the future impact the way we visualise them? How will these scenarios influence the way decisions are made about the future?

Susann: Projecting into the future opens us up to multiple possibilities, a sense of possible futures without the fact-based judgment that we apply to the present, this opens up the space for considering multiple possibilities.

Giny: I do think that big data is very dangerous. People would just check the historical data and analyze it to make future decisions. Some wisdom cannot be completely reflected in the data. Thus, big data alone is dangerous. I would prefer to organize knowledge campaigns to brainstorm knowledge and even get some wisdom from different colleagues instead of relying on data always (using different tools, e.g. design thinking tools, STAR model or other story circle techniques to provide a framework for brainstorming).

Gary: Scenarios can be used to help people to think differently - i.e. to change mindsets. Mindsets are not just ways of looking at the world, but involve cognitive skills, ways of thinking, e.g. not just how the system work, but how it doesn’t work, the boundary conditions where the system breaks down, how to know when it’s

breaking down, how to do workarounds, and knowing where novices may get confused and need help.

Patrick: How can we use scenarios to change actual behaviours and not just mindsets?

Derek: What is the sequence? Is it mindsets (behaviour) first, then process design, or process design, then mindsets (behaviour)?

Gary: The two are likely to influence each other and be iterative. Mindsets influence process choice and design, and you will learn things in new processes that inform mindsets.

Giny: To change mindset, I think storytelling alone may not be enough...how about playing some experiential games and through games to debrief them and hence change their mindset.

Mandy: Giny gamification is good as a safe space for thinking differently and using their imaginations.

Giny: Yes, changing mind through gamification is better than telling and persuading.

Gary: Scenarios are one tool among others to change mindsets.

Susann: Mindsets are hard to change but we can change the environment in which the mind is set. E.g. using carrots and sticks.

Derek: My point exactly, Susann. Too often leadership inflicts large scale behavioural (desired) change without altering the processes and structures to shape the behaviours. But carrots and sticks can lead to the "Cobra Effect" leading to unintended consequences - e.g. gaming the KPIs

Susann: I would say it's also about peer pressure.

Patrick: Mindsets and behavioural change and environment change and social interactions/ reinforcement bounce off each other.

Gary: We can identify where are the points of resistance, and make changes to nudge people. People get practice in using the new mindsets and seeing the results of using the new mindset, providing a feedback loop to reinforce the benefits.

Robi: In my sector (investment management), knowledge can often be guarded by the individuals or organisational silos that have it.

Edgar: That's an irony - the people whose mindsets need to change the most or most need to change their own mindsets could also be most entrenched in their own beliefs.

Mitch: mindset change can also be supported by Gary's point on strengthening teams. you turn teams into champions who are able to push for that change from the bottom-up while push from top-down is happening (or even if it's not happening).

Giny: Sometimes, an individual's mind could be relatively easy to change. But how about culture? How to change it effectively?

Gary: Surprise, imagination, and curiosity and powerful but under appreciated forces. Example of John Schmidt - using tactical decision games with young officers -

provided a scenario with no planning data to support the logical planning process they are used to - they are just told the information is not available. There is discomfort but after a few iterations, they become more adept at working with situations that have incomplete information, uncertainty, ambiguity - which is what we need when dealing with the future.

Colm: Do scenarios help take the sting out of 'hot cognition'? Repetition of practicing (and being in) uncomfortable scenarios to support the capability of becoming comfortable with TUNA (Turbulent-Uncertain-Novel-Ambiguous) situations in the present and future?

Robi: "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." (Mark Twain)

Derek: There is a dangerous assumption that change initiatives, and change roadmaps, customer journey mapping, scenario plans have determinable causality and possess linearity. Humans and relationships are more complex than that. What we don't deal with well is ambiguity, we prefer command and control, the engineering paradigm, this causes issues with most initiatives, projects etc.

Susann: We work with archetypal scenarios: growth, collapse, constraint and transformation. People are often uncomfortable with the collapse scenario, but when we use archetypal scenarios they have to consider all of the possibilities, sometimes in combinations. We need to get people to think about what they consider "impossible".

Patrick: So do we steer people towards scenarios where they are uncomfortable? These may represent blind spots?

Shams: Some surprises can be good too. Fear of uncertainty is not new. The question is how we adapt to uncertainty.

Beto: Scenarios can be useful as a regular exercise to envision futures and connect our current actions to them. This way, decision-makers become more familiar with systems thinking, long term thinking, and learn from their decisions' results through time. In that sense, could this be approached a learning processes for organizations?

Patrick: "Rehearsal" as going to a place beyond normal expectations, and learning how to act and adapt in novel situations.

Robi: I have found simulation exercises to be extremely useful.

Patrick: Wargaming is now moving beyond military uses, to take people through activities with win-lose outcomes and emotional investment in the results. People get more invested in the outcomes than a paper exercise, and learn more deeply.
<https://journals.sagepub.com/doi/full/10.1177/13540661211064090>

Alim: How to engage subject matter experts in scenario exercises? Their mindset is often to reduce uncertainty by applying their vast knowledge and expertise, e.g. assigning probability scores to possible futures. How can we use their abilities ie to

hypothesize and mentally simulate possible solutions when dealing with possible futures? Or is that kind of sensemaking detrimental to futures work?

Susann: This is a great question: You should use diverse experts and bring them together on a topic that connects them.

Derek: The Cynefin framework for sensemaking can help here.
https://en.wikipedia.org/wiki/Cynefin_framework

Jim: Do scenarios enable people to think beyond the limits of their mental models? Overcome “knowledge shields” if you will?

Mitch: I think building scenarios with a diverse group of stakeholders helps in this. One gets more insights from others that are usually beyond our own purview.

Alim: Yes, building common ground is a plus: also, we have analyzed scenarios constructed by our managers for blind spots; based on scenario elements available to them that they chose not to include.

Matt: Trudi Lang is good on building social capital through scenario processes <https://www.sciencedirect.com/science/article/abs/pii/S0040162517307849>. And Adam Kahane used scenarios in peacebuilding endeavours in South Africa, Colombia, and elsewhere <https://reospartners.com/reos-management/adam-kahane/>

Susann: Apart from gathering diverse experts, we also bring in intergenerational interactions to develop scenarios.

Beto : I can think of an 'expert' as an 'expert on the past'. Should we also bring along to the table 'creative' non-experts -- or 'experts in imagining' the future, rather than just experts in the past?

Patrick: Maybe we should use the word “witnesses” to specific perspectives or worldview, instead of “experts”

Shams: How do we help identify the underlying assumptions and beliefs in the revealed future scenario?

Jim: Are scenarios just a function of framing/reframing within the Data/Frame Model (DFM) model of sensemaking?

Patrick: One of the reasons I thought this topic was interesting for a panel, was because very rich (knowledge-revealing/ knowledge-shifting) scenarios often come out of (or are inspired by) critical incidents within an expert’s past experience. So in a sense, scenarios become a proxy for lived experience, and I think could legitimately fit within the DFM model.

Edgar: There is power play in developing scenarios - whose views and imagination will prevail.

Matt: Dominant interests can colonise the future. Groups can seek to force their own perspectives on other groups. We need to recognise that this is a collective journey which brings with it a responsibility for listening. Who is not present, what is not being said? We need to have a diverse group working on foresight

Alim: "The future is already heavily colonised"

Edgar: "Seeing What Others Don't" :) <https://www.amazon.com/Seeing-What-Others-Dont-Remarkable/dp/1610393821>

Jim: Is there any experience in deliberately seeking out adaptive expertise in foresight (i.e. not just the formally recognised experts who arbitrate the knowledge domain)? Is there any thought on when and how you would use "novices" and "journeymen"?

Matt: The Oxford approach to scenario planning seeks to improve capabilities for dealing with uncertainty in strategy. <https://sloanreview.mit.edu/article/using-scenario-planning-to-reshape-strategy/>

Matt: Exformation - what is excluded from the information frame: especially Cassini Nazir "Architecting Exformation" <https://vimeo.com/408704024> - The stuff we should be curious about but we don't even think about.

Jim: How does 'exformation' relate to the common idea of plausibility within scenarios, or likelihood?

Shams: What is the significance of empathy and ethics in creating future scenarios? Plato viewed knowledge as a form of rational understanding that leads to the highest truth, while wisdom is a spiritual intuition that goes beyond rationality. Foucault, on the other hand, saw knowledge as a product of power relations and social practices, and wisdom as a critical attitude towards dominant discourses and power structures.

Gary: Scenarios are helping to combat over-simplification - but we should not make the process so complicated that the decision makers freeze. You give me all this additional stuff to think about, run the risk of paralysing the decision makers.

Gini: Everything has its blind spots/ weaknesses. It is hard to avoid simplification.

Alim: Gigerenzer: more information can lead to worse decisions (under certain conditions) <https://www.amazon.com/Gut-Feelings-Intelligence-Gerd-Gigerenzer/dp/0143113763>

Giny: Yes, information overload. Same problem when we have too much data.

Clint: That is where the experts come in. The ability to shift through the information and determine what is important and what is just noise.

Derek: Heuristics: simplify and create low energy pathways for people.

Patrick: Perhaps what we need is a process, after we open up the field to multiple possibilities, then to “sharpen” to “novel simplifications” that are productive.

Matt: We need to recognise that there is always going to be an “unconscious” the dark matter that we are not seeing. As long as we are aware it is there, and what we see now is not everything.

Shams: How about we begin with a conversation that leads to dialogue, then debate and finally a vote.

Giny: Sometimes voting is risky. You never know whether the collective knowledge is really correct or not. I would keep the points from both sides in the debate and let the readers to determine their judgement instead.

Patrick: Bad paraphrase of Thomas Tranströmer poem, our lives are a compendium of impossibilities.

Matt: "A compendium of impossibilities", what a phrase!

Patrick: Actual extract from his poem “Brief Pause in the Organ Recital”

...and I waken to that unshakeable PERHAPS that carries me through the wavering world.

And each abstract picture of the world is as impossible as the blue-print of a storm. At home stood the all-knowing Encyclopedia, a yard of bookshelf, in it I learnt to read.

But each one of us has his own encyclopedia written, it grows out of each soul, it's written from birth onwards, the hundreds of thousands of pages stand pressed against each other and yet with air between them! Like the quivering leaves in a forest. The book of contradictions.

What's there changes by the hour, the pictures retouch themselves, the words flicker. A wave washes through the whole text, it's followed by the next wave, and then the next...

Jim: Is scenario planning a tool for problem solving about the future, or tool for developing understanding and experience (futures literacy)?

Patrick: Jim: absolutely the second in my view.

Jim Maltby: That's not how it is usually used though, or is it? Martin: But transformative scenario planning can also be used to define strategies that influence the future?

Matt Finch: While bearing in mind that "futures literacy" can itself be a problematic and hegemonic term, as Keri Facer and Arathi Sriprakash have argued <https://www.sciencedirect.com/science/article/pii/S0016328721001166>

Alim: And yet our colleagues from UNESCO use it extensively <https://en.unesco.org/futuresliteracy/about>

Matt: Yes, Facer and Sriprakah's article points out how it is problematic to then render some people as "futures illiterate"

Jim: I think of FL more in the form we discuss here:
<https://www.sciencedirect.com/science/article/pii/S0016328722000222?via%3Dihub#>
! AKA Macro cognition, and/or as Andrew Curry says 'Futures Competence'

Silvia : What about positive future (imaginative) scenarios that can lead to new thinking and action?

Alim: On the power of metaphor: worth 5 minutes of your time if you haven't seen this; we use it in our KM trainings
<https://www.youtube.com/watch?v=A0edKgL9EgM>

Patrick: Responding to Susann's comment that the Covid-19 pandemic response was based on a very mechanical metaphor. The metaphors we use do constrain our thinking - they provide some options and ways of looking at things and exclude others. For example, in KM we use a dominant "knowledge as a thing" metaphor, which implies actions such as collecting, storing, organising, moving, etc. Sometimes we use a flow metaphor. Daniel Andreessen pointed out that different cultures use different metaphors for knowledge, and he asked the question how would our knowledge management processes change if we used the metaphor for "knowledge as love" - as a means of emotional engagement?
https://www.researchgate.net/publication/229049883_Stuff_or_love_How_metaphors_direct_our_efforts_to_manage_knowledge_in_organisations

Beto: That is a strong proposition, Patrick.

Heather: Knowledge as "love" is a metaphor that compels us to work at a level of unconditional awareness. Much can emerge from holding this stance.

Shams: Knowledge as love compels us to interact with empathy also. There are many metaphors related to knowledge as: good, power, and prayer.

Jim: Also this <https://smithery.com/2020/12/10/think-of-information-as-light-not-liquid/>

Derek: What about the theory that knowledge possesses mass? I think it might be part of constructor theory.

Jim: How do you achieve this kind of deliberation, in a transactional process, such as how policy is actually done? What most are advocating is a more deliberative process, how can you get to from where we are now to that kind of deliberation?

Patrick: We have found that policy and strategy work is increasingly needing to become more participatory vs transactional.

Jim: But that's not how most policy and strategy is done. So how do you enable that where organisations, institutionally resist this?

Patrick: I have seen the trend towards more participatory, and I think it comes from a realisation that the transactional process simply doesn't work any more. Even those uncomfortable with a participatory process can see that has better outcomes. It takes time, and feedback (usually things going wrong, or recognition of an enormous gap between where you are and where you need to get to).

Matt: Wicked problems: Ramirez & Ravetz also have "feral" issues alongside wild and tame issues

<https://www.sciencedirect.com/science/article/abs/pii/S0016328710002880>

Derek: TRIZ is another structure to use in conjunction with pre mortem

Jim: I think the most important thing about premortem is that it makes explicit how what we already do (the plan) needs to be altered. Much scenario planning (IMO) lacks clarity around 'the plan', that makes the explanations much harder to be articulated.

Susann: Scenarios should be followed by backcasting to make a plan. And then they should be followed up in projects and experiments, with reflections on the lessons learned.

Matt: Strategy now is becoming about how to create a portfolio of strategic options, not just plans <https://www.sbs.ox.ac.uk/about-us/people/trudi-lang>
<https://hbr.org/2022/05/the-best-strategies-dont-just-take-a-long-view-they-take-a-broad-view>

Edgar: Pre-mortem sounds like it would work especially well in contexts where people shy away from being confrontational.

Eileen: Yes, very useful technique. Have used it for Knowledge Policy development.