THIS BRIEFING PAPER INCLUDES KEY TAKE-AWAYS FROM TANK MEETING NR 48, THE FOURTH IN 2019, HOSTED BY VINNOVA ON "HOW CAN WE HELP STRENGTHEN SWEDEN'S INNOVATION CAPACITY?"

The Tank Meeting took place on December 4th, 2019 at Vinnova in Stockholm.

PARTICIPATING COMPANIES & ORGANIZATIONS
Alfa Laval, Asko Aplliance, AstraZeneca, Castellum, CGI, Dentatus, Ericsson, Frontit, Försäkringskassan, Googol, Handelsbanken, Ideon Open, IKEA, Innovationscenter Arbetsförmedlingen, Internetstiftelsen, KTH, Lindab, McKinsey Design / Veryday, Migrationsverket, Naturvårdsverket, OKQ8, RISE, Vasakronan, Volvo Cars, White Arkitekter.

PURPOSE
The last Tank Meeting of 2019 focused on the power of collaboration to support the Swedish innovation ecosystem, with Vinnova, Sweden's innovation agency, as host. The theme of the Tank Meeting was "How can we strengthen Sweden's innovation capacity?" Participants were given insight into Vinnova's way of working, as well as an introduction to the innovation method 'Missions' and presentations on Vinnova's focus on projects revolving around AI. The Tank Meeting was also meant as a forum for Vinnova to get feedback and suggestions from Innovation Pioneer's members on what the private and public sector needs in terms of innovation support and financing.

VINNOVA – ABOUT THE HOST
Vinnova is Sweden's innovation agency with a goal of building Sweden's innovation capacity and contributing to sustainable growth. Today, Sweden is a top nation for innovation with several top index scores such as being on the #1 European innovation scoreboard, #3 Global innovation index and #1 SDG index. However, we always need new ways of organizing the system, new ways of collaboration and new sustainable business thinking to stay competitive. Vinnova is one party supporting the system, but many other roles are needed to make the system work. Through system innovation Vinnova is looking at how different layers of the innovation ecosystem affect each other: infrastructure, skills, and policy all need to be in place for a movement to happen. Vinnova supports the innovation ecosystem by being a financier, national EU node and expert agency.

> **Vinnova is tasked with promoting sustainable growth by funding needs-driven research and development of effective innovation systems.**

Vinnova works to support innovation growth across Sweden as well as globally. Working in a global context supports the development of international networks for Swedish innovation stakeholders. One focus is making Sweden attractive, but it is also important to find the right partners in other countries that have the competences needed by Swedish companies. A contribution to this is made partially by supporting and financing Swedish actors in the EUREKA program, a company-run program with

projects that are carried out between different companies and countries. *More about EUREKA can be found here:* <https://www.vinnova.se/m/eureka/>

Some programs that are running with Vinnova at the moment are focused on research on vehicles, strategic innovation, collaboration for sustainable innovation, challenge driven innovation, building up environments in regions, academic research (Kompetenscentrum), and smart policy developments. Future plans for mobilizing the system innovation can be seen below:
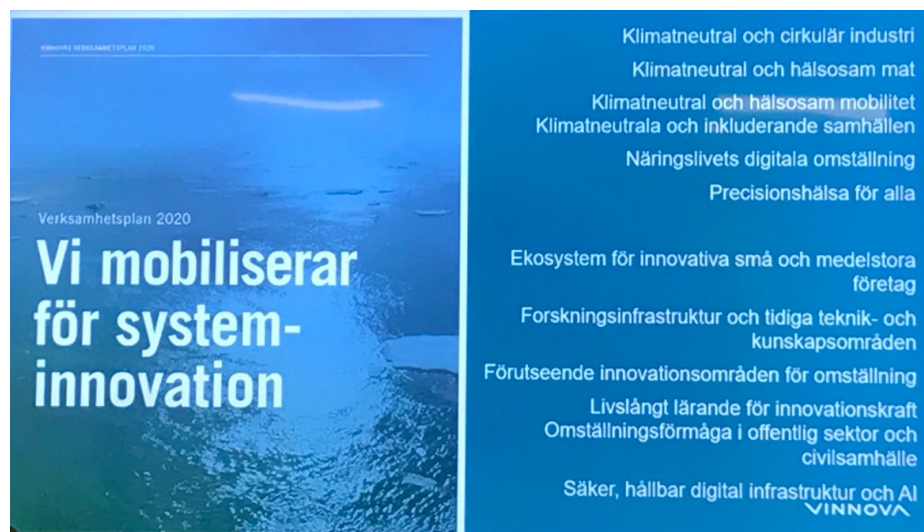
MISSION-ORIENTED INNOVATION

The team at Vinnova went on to present how they are working with 'Missions' and how and why to work with mission-oriented innovation: "Missions are bold, inspirational, with wide societal relevance. They indicate a clear direction, ideally targeted and measurable, with ambitious innovation actions. They are delivered through multiple top-down and bottom-up solutions, and co-created via cross-disciplinary, cross-sectoral and multi-level relationships and activities."

One aim for Vinnova has been to work with the "mission" of engaging with many different actors to understand who they are and how they fit into the innovation ecosystem in a holistic way. An overall design process has been created to learn more, pin-point areas and get different angles of the system. Vinnova has chosen a mission-oriented method to reach this goal. This means that the focus has been directed more on actions rather than targets such as inclusion, democracy or practices of learning.

MISSIONS EXAMPLES
- The Apollo missions (1961–73): "Land a man on the Moon by the end of this decade and return him safely to the Earth."
- Miljonprogrammen (1965): "One million affordable new dwellings by 1974."
- Vision Zero (1995–) - "No one should die or be seriously injured in traffic."
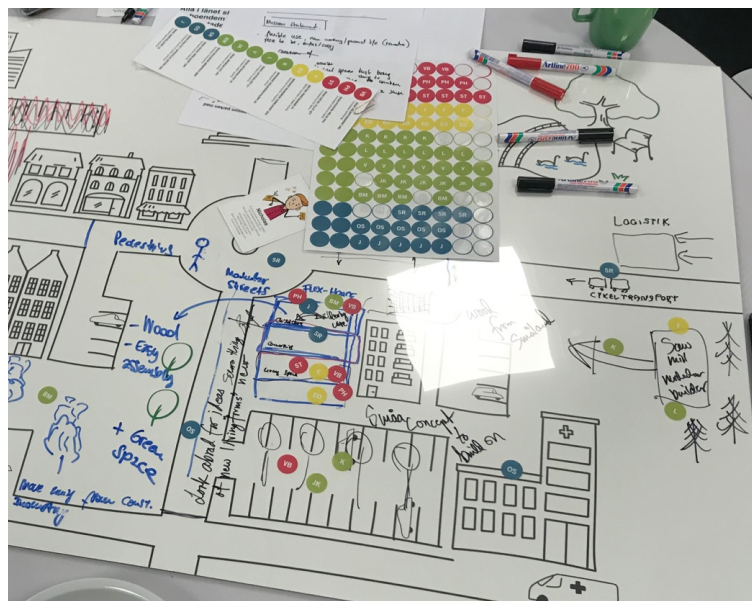
MISSION POSSIBLE PART 1 - WORKSHOP

Participants at the Tank Meeting got a chance to work with the "Missions" method in a workshop before lunch. Participants were divided into six different groups. Each table were given notes about a specific theme. The group members discussed their latest contact with the theme; both personal and professional.

Create a mission (15 min) was the first step of the workshop process. Examples of missions were available, for instance: "Ensure every street in Sweden is healthy, sustainable and vibrant by 2030" and "Ensure every student in Sweden eats healthy, sustainable and tasty school food by 2025". Global, national and regional goals were also provided. Each group created a mission for their table; with the instruction of being ambitious but not impossible.
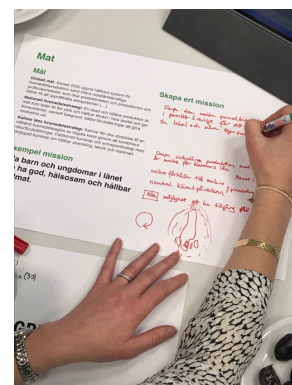
Design interventions (30min) was the second step. A big canvas was provided for each group to use when illustrating their future world. Using this technique was meant to enhance the missions by being able to see them, touch them and make them concrete. A persona was provided and used to start a story about a person living in this future world to make it more tangible. The continuation of the story was then meant to be told through the canvases of each group. A new reality was sketched to make it visible.

Tip from a participant: *Foldit, gamification of research* was brought up during a discussion about how important and complex things can be helped by gamification.

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Assess outcomes (15min) was the next step of the process. Reflections were made to assess the outcomes of the most discussed interventions. Stickers were provided to help the groups mark the key benefits. Most groups were quick to agree on where to put which sticker. Some stickers were empty for the possibility to fill them with own content.

The last part of the process, **Reflection (10min)**, was about reflecting about the exercise. Some of the thoughts shared by the different groups:
- Possible to apply on other cities as well, but the structure needs to be changed.
- We started within a building and then went outside the building, to the society.
- You got more creative with help from the dots.
- We tried to see connections between the different buildings – by giving credits for coming together in a more collaborative way.
- When we get hands-on, that is when we get inspiration and learning.
- Important to go back to the mission and see what kind of interventions that are working.

LEARNINGS & REFLECTIONS ABOUT AI

The second part of the day started off with a presentation and discussion about Artificial intelligence. The evolution of AI is raging fast and has the potential to lead to radical changes in our lives and for society as a whole. Artificial intelligence is an important part of Vinnova's work with innovation.

A general view on Sweden's AI capability is that we are in a good position when it comes to our advances in digitalization and collaborations. However, many people in leadership positions dont understand the potential of AI. Vinnova is currently working on and investing in the following areas: *data and infrastructure, innovation capabilities,* and *from AI-research to innovation (strategic themes – NLP national language practices).* The interaction between human and machine needs to be put into context to make the advances of AI both technology and market controlled.

Some important barriers to keep in mind when implementing and working with AI are: rules and regulations, storage capacity, computational capacity and competence.

- A focus when developing AI should be to use the technology to solve different business needs, such as increasing efficiency or optimizing different tasks.
- It is important to have humanity in mind when developing AI. An important aspect is to develop the technology to start off with solving simple tasks, instead of complicated ones.

The discussion continued with what challenges different participants saw with AI:

- What do we mean when we talk about AI? The definition needs to be clear.
- Knowledge is missing – we know very little about AI.
- What is AI capable of doing? What can you do with AI?
- How much data do we need?
- The term and concept may be misinterpreted
- Where do you use the power of AI? Internally or externally?
- Buzzword, AI can mean "amazing innovation" to see the benefits instead of the technology first.
- Spread the competence and gain a foothold in the organization
- AI is a good hammer that we have not had access to before – can you use AI to improve efficiency or production at a company for example?
- AI is a tool and we need to take a stand and lift our eyes to then choose the tools where AI can be one alternative solution. We may have had the wrong expectations.
- How could we benefit from our AI applications?
- We need to distinguish between narrow AI for specific problems and conditions, but by extension we have general AI that we don't really know anything about, that brings philosophical issues.

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> **Sweden should be a international leader in taking advantage of the opportunities of using AI can give, with the purpose of strengthening both the Swedish welfare and the Swedish competitiveness**

Further reading tips brought up during the discussion:
- Accelerate through horizontal resources. More at: http://www.ai.se/en
- Elements of AI is an introduction course in AI. Read more and take the course at: https://www.elementsofai.se/
- The book Life 3.0 by Max Tegmark (Swedish Liv 3.0)
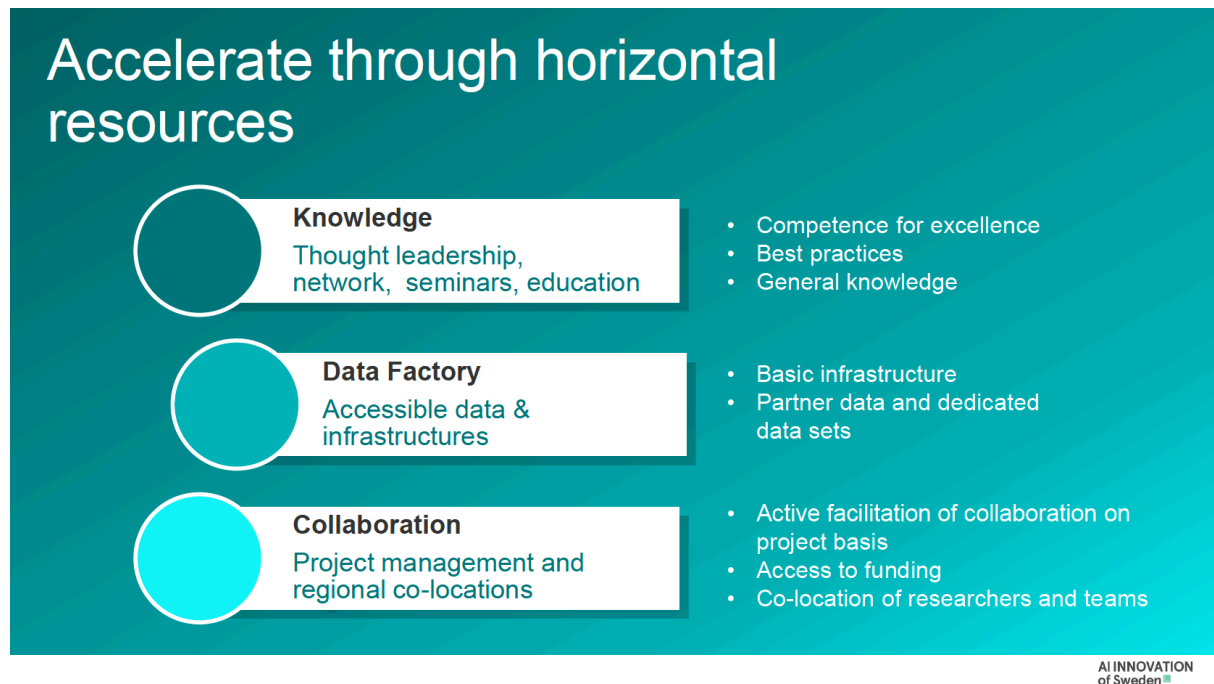
MISSION POSSIBLE PART 2 – WORKSHOP

The next workshop focused on the theme question for the Tank Meeting: "How can we strengthen Sweden's innovation capacity?"
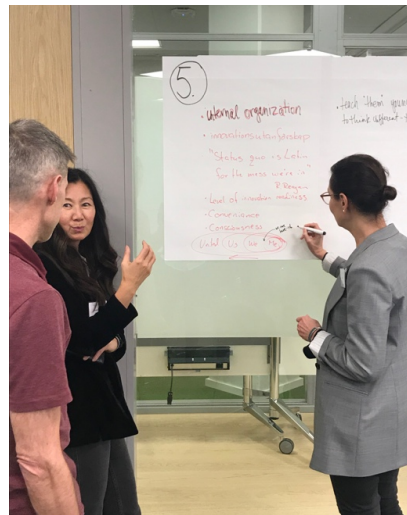
Vinnova help strengthen Sweden's innovation capacity through supporting organizations with financing, working with the internationalization of the innovation ecosystem, and focusing on mission-oriented work. However, Vinnova believe that they need to increase their ability to provide support at different levels. Today there is a gap between management and employees, the strategic leadership needs structure and direction. Vinnova is therefore working need-driven with different actors to *identify* needs, *capture* needs and *verify* needs. They work with strategic support to know what needs to be strengthened and addressed.

After the brief participants were asked to individually: **reflect upon what your organization is currently doing to strengthen Sweden's innovation capacity (5min)**

This individual reflection was followed by group discussions leading up to the next task: **discuss what is hindering your organizations from contributing further to**

strengthen Sweden's innovation capacity? (10min) The task aimed at identifying the main challenges. Some challenges mentioned were about the balance between short-term and long-term plans.

For the last part of the workshop, participants were asked to: **discuss how you could work together to strengthen Sweden's innovation capacity? (10min).** Some groups believed that sharing your journey of tests and failures could help. Important aspects are also to be aware of which level of risk you want to take, because challenges means dealing with risk. Co-creation and networking were also mentioned, but with emphasis on collaborations with companies you usually don't work with. Collaborating with Innovation Pioneers members was another solution mentioned to strengthen Sweden's innovation capacity. Focusing on teaching youth about innovation was another suggestion.

Tips mentioned during the discussions:
- Listen to Vinnova's podcast to learn more about their missions.
- Museum of failure as an initiative to learn about innovation projects that fail

LEARNINGS & REFLECTIONS
The Tank Meeting ended with sharing learnings and reflections about Vinnova and the workshops during the day.

Participants also had a chance to give suggestions to Vinnova on how they could work to better facilitate cooperation between different stakeholders to further strengthen Sweden's innovation capacity.

- Change the business model, suggestion to use competitions as a complement model.
- Forums for failures, forums to work with cases.
- Help organizations in the search for investments. As an example, Karolinska University Hospital help their researchers to write fund applications.
- Looking at lists of Sweden's innovation ranking globally is great, but we should maybe look at what we are not good at instead.
- Vinnova could manage patents that are not being used. For example, Region Skåne works similarly with it. Maybe it would be possible to resell patents?
- Vinnova could benefit from networks such as Innovation Pioneers. Maybe it would be a possibility to collaborate with Innovation Pioneers, to get new perspectives on the agency's work
- A strong focus on knowledge transfers is relevant: Feed the teams so that each member can take learnings back to their own organizations. Learning and feedback loops are parts of this knowledge transfer.

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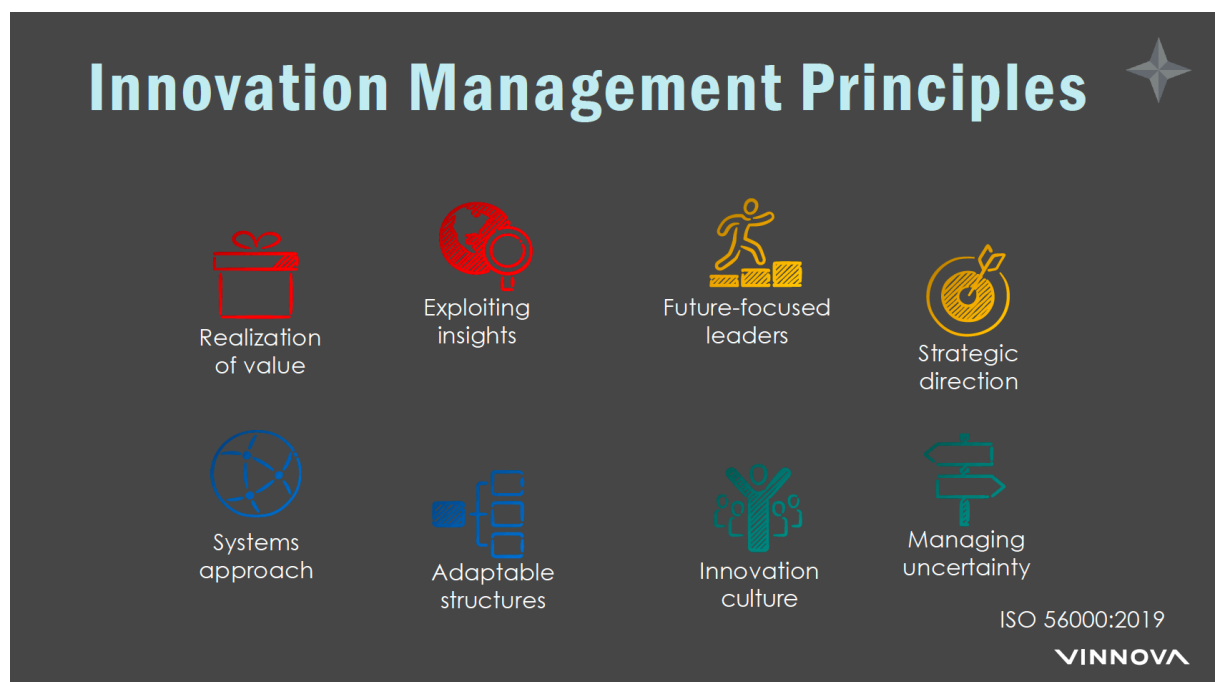
CLOSING THOUGHTS

There were around 50 participants at Tank Meeting #48, coming together to discuss how different actors can collaborate to strengthen Sweden's innovation capacity. Discussions had during the day between different participants suggest that both Vinnova as well as Innovation Pioneers' members gained a better understanding of how both public and private actors can work to support the innovation ecosystem.

Innovation Pioneers will continue to explore possibilities to work with different forms of collaboration together with Vinnova going forward.

Thank you to Annie Lindmark, Ylva Strander, Andreas Aurelius, Andrea Råsberg, Tobias Öhman, Filip Kjellgren, Glenn Gran & David Renemark, Joakim Skog, Daniel Rencrantz and the team at Vinnova for a day of collaboration, 'missions', AI and discussions on how Sweden can stay on top of the global innovation landscape.

SHARED DOCUMENTATION

PRESENTATION
Presentation from Vinnova
(available on Member's Area of website: innovationpioneers.net/members-area)

UPCOMING DATES FOR 2020
- Tank Meeting #49 – 24th-25th of March – host TBD
- Tank meeting #50 – May – host/format and date TBD
- Tank meeting #51 – 15-16th of September – host TBD
- Summit 2020: November – date TBD
- Tank Meeting #52 – December – format and date TBD

CONTACT
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