

# SESG Summary and conclusion

- 22.11.2018 @ USN Kongsberg
  - 2pm – 5pm

# SESG numbers and data

- SESG facilitators: 2
- Coffee with cookies available: Yes 😊
- Duration: 3 hours
- Participants: 25-30 (people from industry and academia, including SESG facilitators)
  - Signed up: 34 (16 with industry email (from 8 different companies))
  - Attended: 25-30
- Presentations: 3 (43 slides total)
- Presenters: 3 (all from industry)
- Workshop groups: 6 (4-5 people in each group)
- Posters with group feedback

# SEESG

Systems Engineering Study Group

The Systems Engineering Study Group meets at University College of Southeast Norway, Kongsberg, Norway. The objective of the meetings is to exchange experience between people who are interested in Systems Engineering or who have the intend to become a Systems Engineer. The SESG discusses one theme per meeting, the subjects are one of many SE aspects. We have two to three meetings per year.

The SESG would like to invite you to the next meeting at Krona classroom 2228/2230, University College of Southeast Norway, Thursday November 22<sup>nd</sup> 2018, **2pm to 5pm.**

**Topic:** "How can you improve the state of practice of Systems Engineering in your company"

**Description:** Students of the systems engineering master program at USN often give the feedback that "it isn't easy to apply systems engineering in their company". Similarly, we hear from many managers at companies that they do not apply systems engineering. This latter is probably not true. Most companies apply something that is a flavor of systems engineering, using different words and tuned to their specific domain, systems and technologies. However, we see everywhere opportunities to improve current practice by using the body of knowledge across domains. How can we make such improvement process working?

In this session, we asked a number of speakers from small and large companies to reflect on their current practice, needs, and expectations

for systems engineering.



## Agenda and presenters:

14:00-14:10 - Welcome and introduction.

14:10-15:00 - Presenters:

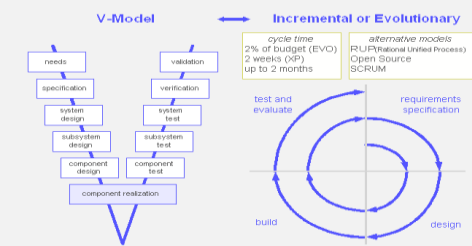
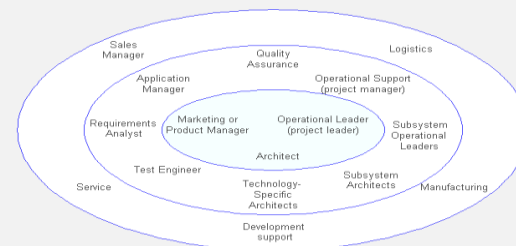
- Tyler Jones (Norwegian Space Centre)
  - Systems Engineering for Microspace
- Christoffer Jimmy Røsegg (Flebu International)
  - Anders Fuglesteg Nilsen (Semcon)

15:00-15:15 - Break.

15:15-17:00 - Discussions in groups, wrap-up and closing.

For more information about the SESG visit:

<http://www.gaudisite.nl/SEESG.html>



# Some reflections after the presentations

We have seen 3 positive examples:

- Fast, a not too heavy process
- Mature system knowhow captured and harvested via a model

# Initiating questions for group work

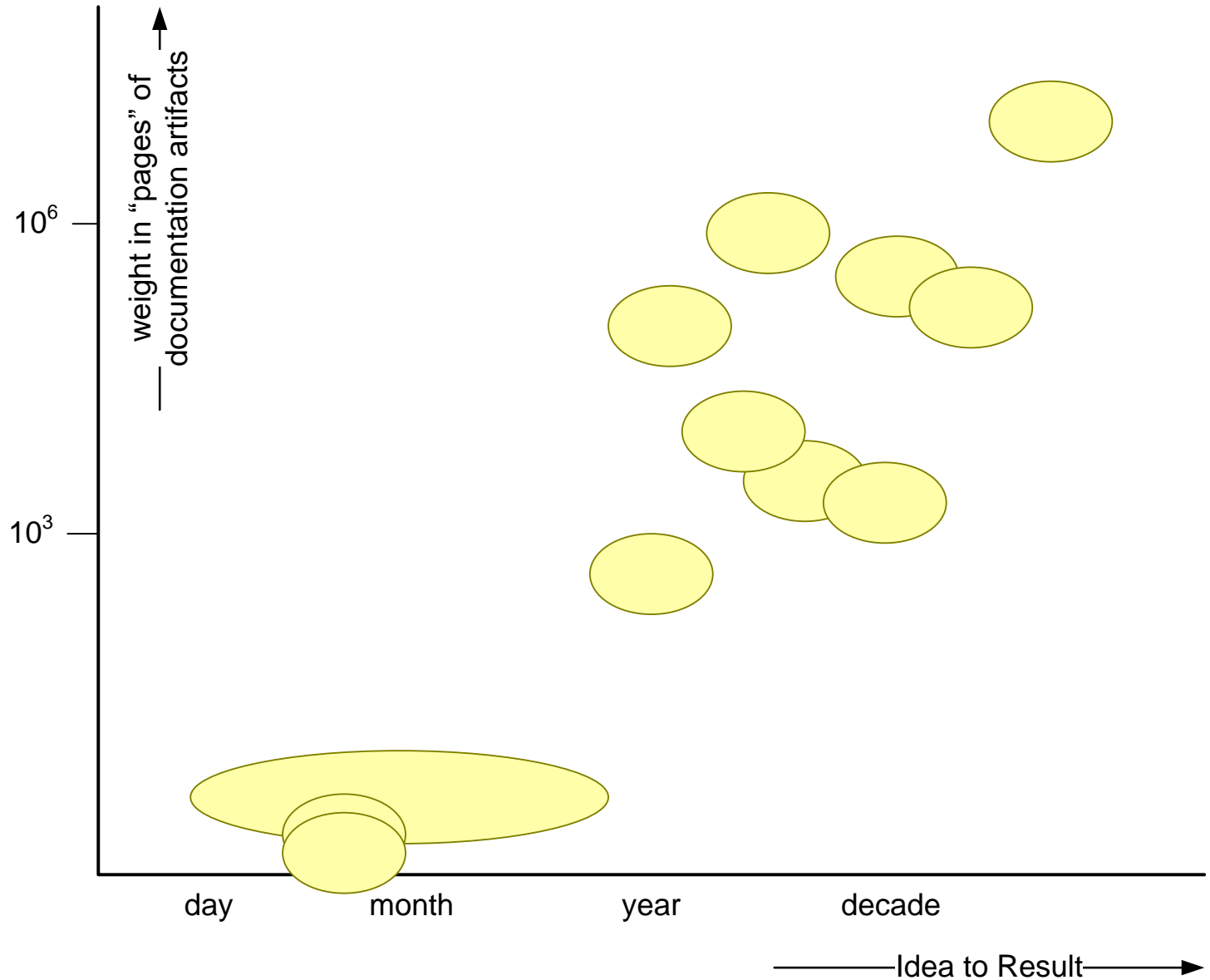
How does your company's systems engineering process compare to these examples:

- Weight
- Agility
- Use of Models

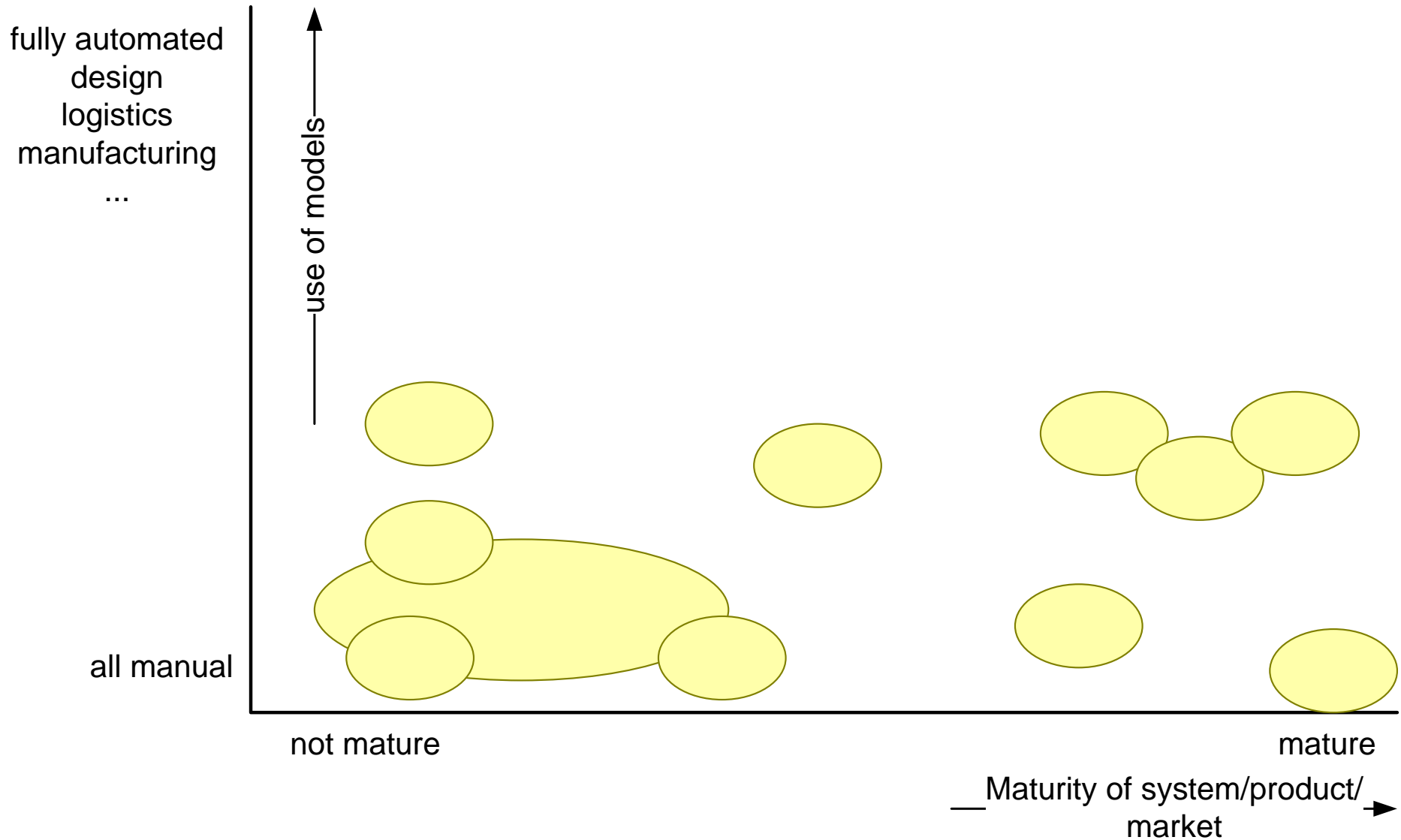
Results on a flip, include examples

After the discussion each company positioned itself on a map of SE process and the use of models

# Map of SE process per company



# Map: Use of models vs Maturity per company



# Conclusion(s)

- Companies from small to large use systems engineering methods and techniques
- Companies have to tailor the systems engineering process to an appropriate scale
- Models capture maturing knowledge and allow for harvesting such knowledge
- There is still a lot of room to benefit more from models