

Sioux Technologies | Hot-or-Not

The Future of System Engineering Servitization technologies & trends

Wednesday April 14, 2021

16:30 hrs opening by Arend-Jan Beltman, Sioux







Please use the **chat** to inform us with your question. We will call you to be present in the live stream.



16:30 - 16:45 hrs Opening by Arend-Jan Beltman, Sioux Technologies

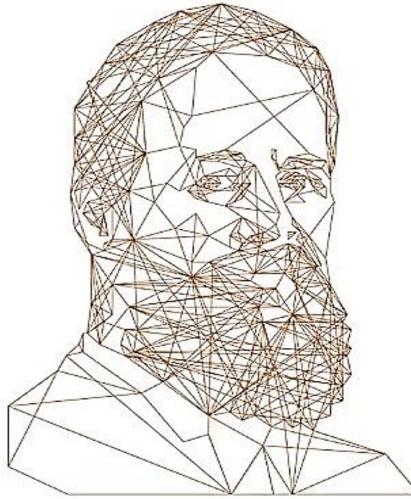
16:45 - 17:30 hrs Keynote by Prof. E.J. Nijssen, Innovation,

Technology Entrepreneurship & Marketing, TU/e

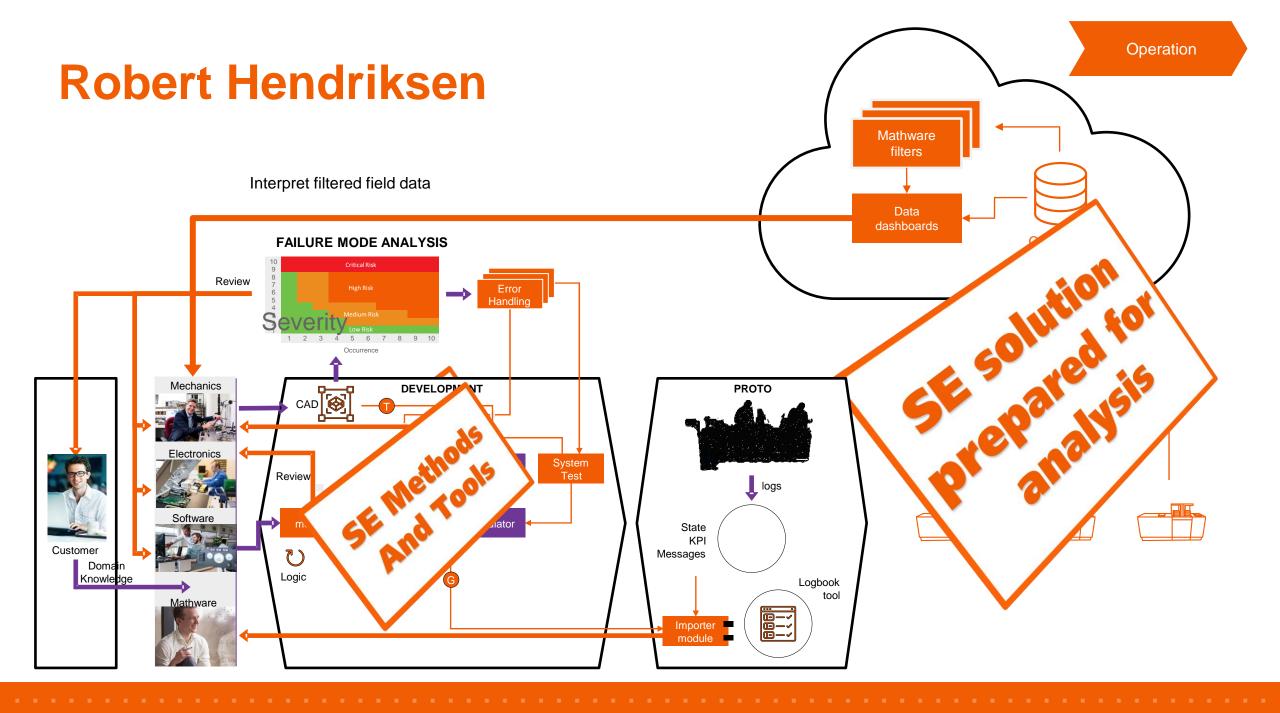
17:30 - 18:00 hrs Dialogue session

Jim Stolze

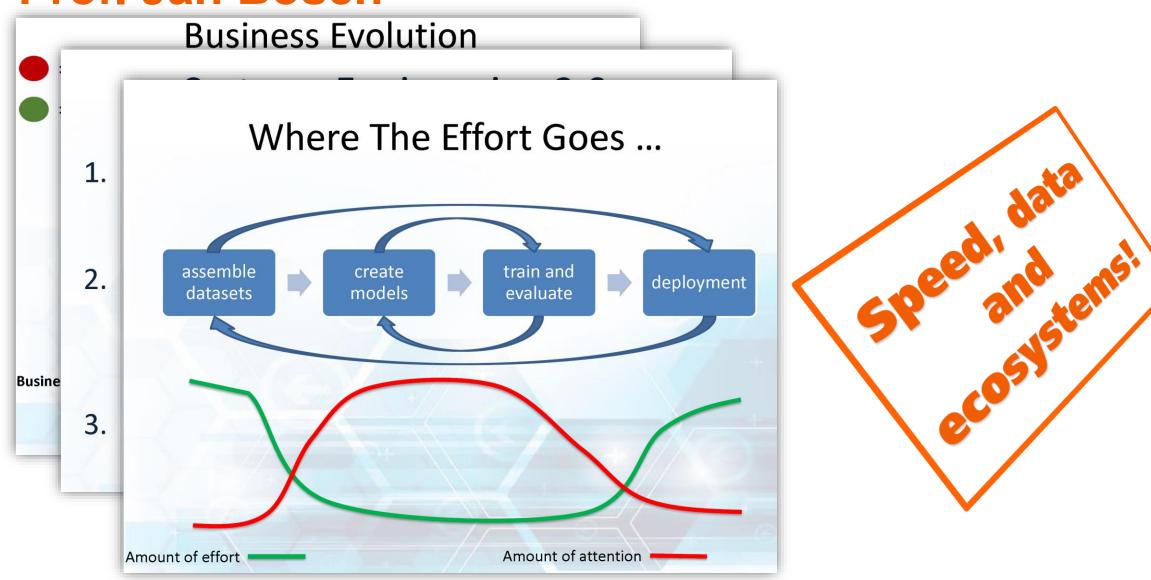
Algoritmisering, wen er maar aan!



Leven, werken en geld verdienen met kunstmatige intelligentie



Prof. Jan Bosch



What is Systems Engineering?

Definition of Competence:

"Demonstrates skills methods to handle technology and m2 age the domain(s) specific complexity with appropriate tools"



Nov. 2020 episode on: Skills & Methods

Methods & Skills

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31%	"Smart Systems" ≠ "Smart Software" AI alone doesn't make the difference. We need an ecosystem. How?
19%	To what extend are educational institutes 'nurturing' SE skills?
17%	Definition of Systems Engineer (≠ Systems Architect?)
17%	Where are those people that can translate fundamental physics into business opportunities? Can we train them (on the job)?
16%	Multiple institutes (ESI, HTSC, EAISI,) How 'one' roadmap agenda for us as Systems Engineers?

Georgo Angelis





High-Tech

Georgo Angelis

High Tech prepares for AI

High Tech prepares for AI



Growing design challenges





Contribute to a flourishing ecosystem: Student teams



Feb. 2021 episode on: Management

Management 10 February 2021

9

How does a team decomposition look like? How to deal with RASCI in your project? Managing CAFCR is teamwork. Who's holding what? How 'management' and System Engineering becomes complementary? (Ben Pronk: 'Het nadeel is dat de toparchitecten een groot deel van hun tijd kwijt zijn met het managen van managers.')

16

Wouter Leibbrandt



"EMBEDDING SYSTEMS THINKING"

Wouter Leibbrandt

We are talking complex systems here ... Standard project management practices

Tensions	Analysis	Synthesis	
System t	ninking managers		
3. Daari	us methodology	\frown	$\overline{}$

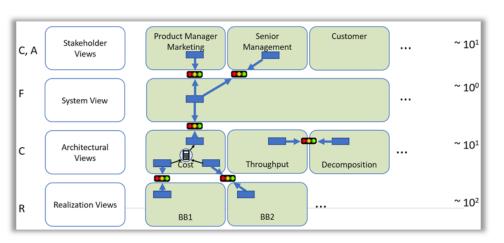
<u>Daarius</u> is a structured, scalable, and team-based system design methodology providing traceable underpinning for key design decisions and leveraging the abundance of simple executable models in systems engineering.

- Team-architecting (replacing super-hero architect)
- Dilemma handling
- Trade-off handling
- Communication across organization

CAFCR based solution space analysis

Allows to stepwise fill and track solution space

- First: criticals
- Then: essentials
- Finally: others



ESI

Apr. 2021 episode on: Technologies & Trends

Technology & Trends 14 April 2021

29%	Jan Bosch mentions that we need to bring up architectures that meet the 'XaaS' objective. Is Brainport compatible for such a service?
27%	Where and how can we apply AI as part of my machines?
24%	Behaviour (and interaction) is something you model and derive your code from it seamlessly (writing it down is unproductive!!) What is todays the state-of-the-art?
20%	"Digital Twinning" is trending, but how can it support SE practices?

Bridging the gap between Tech, Market & People

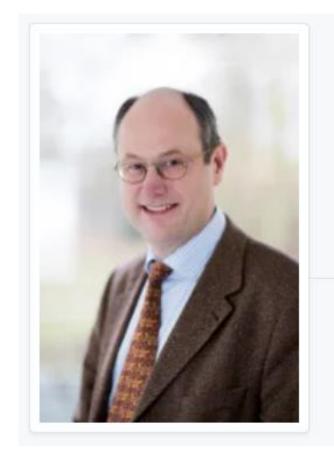


European Supply Chain Forum



Home - ESCF (europeansupplychainforum.nl)

One of the initiators 'Servitization Community'



Ed J. Nijssen

prof.dr.

Hoogleraar, Industrial Engineering and Innovation Sciences, Innovation Technology Entrepreneurship and Marketing

E-mail E.J.Nijssen@tue.nl

Save the date theme session:

- ✓ 11 Nov 2020 Ecosystem for AI (Methods & Skills)
- 10 Feb 2021 Systems Thinking (Management)
- ✓ 14 Apr 2021 Servitization (Technology & Trends)
- 09 Jun 2021 Connectivity & Interoperability? (Tools)



The future at Sioux Technologies?



Let's get connected!



Thank you for being with us, see you next time in June!

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