

SKL Study Trip to Eindhoven



Tinus Kanters,
Founder of
CityLab Eindhoven

What can you expect to learn more about?

- What has been the relevance of the **context broker** so far?
- What has worked for us in our Smart City efforts? (e.g. 4 tier model and strategic architecture)
- How have we **shared our solutions**?
- Where are we now? What's next? **Steps towards Health & Happiness**

Welcome to the CityLab!

We are excited to welcome you! Obviously because there's an exciting opportunity we could learn from each other and we are more than willing to kickstart that process by sharing what we have learned.

We have prepared a program in 3 parts. On Tuesday evening we will take you to Stratumseind, the largest pub street in the Netherlands. This is where our earliest efforts in Eindhoven as a Living lab started.

On Wednesday, in the morning we will share details on our development, our model and our architecture. Addressing the context broker and many other things.

In the afternoon, we will share how the municipality of Eindhoven is trying to deploy IoT & Smart City technology to have a positive impact on Health & Happiness.

Tuesday evening: Living Lab Stratumseind 2.0 LIVE

After dinner, Tinus Kanters will take us to Stratumseind, one of Eindhoven's oldest streets and the largest pub street in the Netherlands. This is where it all started.

In 2012, Tinus presented an initial setup for a Living Lab in the town hall. Rapidly convinced of its practical usefulness, it was given a home in the 'Oude Rechtbank' (the old courthouse) on Stratumseind. Here it became a Living Lab for Safety & Security.

Tinus, who has a rich history in events, code enforcement and crowd management, will show you the infrastructure created, will highlight a number of the applications and, most importantly, will give you a feeling for the innovative work that has been going on from the ground up since 2012.

Stratumseind is very close to the Pullman Eindhoven Cocagne hotel. This walk is a good start to get to know each other a little.

'We know that no single city can afford to finance all investments required to become a Smart City. So what can we do together?'

CeesJan Mol,
Creative Ring



Sometimes it does not make so much sense to look back. In the case of 'the digital revolution', it's different. What we are now calling 'IoT' or Smart City, is merely the 6th or 7th digital revolution since the Internet was created.

In the CityLab team we work with a 4 tier model that simplifies the challenge of any digital transformation. We can do so, because we work with Osman Khan. He was the person who connected Philips with Cisco, when Cisco was still a 10 person start-up (see picture). His experience in digital transformations within Philips makes our lives easier.

Wednesday morning: experience, model & architecture

You will be welcomed in the CityLab. Since we have many guests and a rather full programme, it will be impossible to do a thorough round of introductions. So we'll do a superficial one.

Please introduce yourself and briefly explain what it is you really want to learn about Smart Cities (either on this trip on perhaps during the follow-up).

Tinus Kanters (DITSS, CityLab Eindhoven) will then give you a presentation on how the Living Lab Stratumseind 2.0 evolved. He will also share what we have learned so far.

Rick Schager is the 2nd presenter on Wednesday. He works in the municipality's ICT department.

He will detail the struggle he has been facing, to find a way to

introduce 'architectural thinking' in the municipality. He will also describe the various ways in which our solutions were shared (from national standardization to international upscaling projects). And in his unique way he will argue for more collaboration.

Present will also be **Jan-Joost van Kan (ATOS)** and **Osman Khan**. Jan-Joost is the ATOS business architect connecting Smart City deployments across Eindhoven, Hilversum and Almere. Osman Khan is a former Philips employee who's knowledge and know-how permanently inspire how we operate in Eindhoven.

If you have specific questions for this morning, please send them to me in advance & ask them during our meeting.

Afternoon 11th: Health & Happiness

Deployment of IoT and/or Smart City technology should not be done for fun or by technology push. Through different projects (notably 'Roadmap Smart Lighting') we have learned that involving citizens by asking the wrong questions does not lead to a better insight into desired innovations.

Michiel Oomen (municipality of Eindhoven) will talk about his new role within the Spatial Domain. His starting point has been: this new technology needs to be able to make our lives as civil servants better and more productive. Plus: more effective. He calls that 'operationalizing policy'.

Since the overall purpose of all municipal policies is to positively impact health and happiness of people in the city, that is the maximum scope he is currently exploring.

His story will be complemented by **Deniz Tuzcuoglu**, a PhD student from the Eindhoven University of Technology. She will detail some of her research findings on a recent move of civil servants into Smart Building and connect it to efforts in New Zealand to focus national spending on Health & Happiness.

Carolien van Hout-van Delft (Brink Group) with her team is working on software to support 'smart decision making' by municipalities. She will present their vision and ambition.



Why does this agenda not have fixed time slots?

We have found that it is generally quite difficult to determine the level of knowledge people already have and the topics they are really interested in. So we're trying to provide you with the maximum of opportunity to ask for clarification and to raise further questions.

What we hope, is that we will also find the time to learn from you. What is going on in your cities? What are you doing? What problems are you experiencing? What is your next level ambition?

Please, **if you have specific questions**, consider sharing them upfront by email ceesjan@venturespring.biz

If you come to learn something specific, please mention that in your (brief) introduction in the morning.

If you see a concrete opportunity for follow-up, please take it!



What does the Creative Ring have to do with anything?

The Creative Ring is an international association located in Brussels. It aims to connect creative ecosystems across Europe, from Barcelona to Brussels, Eindhoven to Espoo, Aarhus to Zlin.

Important in the realization of any Smart City, is to involve creatives and citizens in the process. Working with the cultural and creative industry can make that happen.

This Study Trip to Eindhoven was organized with the collaboration of CeesJan Mol, chairman director of the Creative Ring. To find out how the Eindhoven developments compare to efforts in Sweden. And to establish what role creative communities are likely to play

Related organizations

CityLab, as the continuation of Living Lab Stratumseind 2.0, is part of the Dutch Institute for Technology Safety & Security (DITSS).

DITSS is a non for profit organization, organizing fieldlabs, testbeds and pilots for testing and validating technological and social innovations in the domain of Safety & Security.

For more information: <https://www.brainport.nl/ditss/english>

The Eindhoven University of Technology has created a **Smart Cities Center**. Its related to the faculty of the built environment, studies Smart Cities in an integral

way, from a visionary perspective. In the center, research lines are explored related to smart buildings and hybrid energy systems, smart mobility, healthy environments, urban data & data platforms, smart societies and innovation ecosystems.

For more information: <https://www.tue.nl/en/research/research-areas/smart-cities/>

The Eindhoven University of Technology has recently [announced](#) the Eindhoven Artificial Intelligence Systems Institute (EAISIE): 50 professors, 100 million Euros (in 5 years).

There is no more information available yet.

Is this how we could mature?

1. Start our individual projects. Then rapidly realize that's going to be costly and start looking for synergies. First within cities, then between cities, then perhaps across countries?
2. We should stabilize the model we are applying. What can we learn from other efforts? What can we learn from the past? In Eindhoven our point of view is that it makes most sense to learn from previous digital transitions in the industry.
3. The essential challenge in any digital transformation is the question: how do we connect all required partial solutions? In other words: how do we create a shared logic à la LEGO? This requires standardization on a reference architecture (is there a better one than FIWARE?). This requires standardization on interfaces, on system components, on data formats. How can we create those standards?
4. With a IoT implementation in place, Big Data will come in. how do we collect it? How do we open it up? Who owns it? What does it mean for the architecture? Which parts move towards the edge, for computational requirements and privacy?
5. How do we create an interface for Big Data? Is the answer a Digital Twin?
6. How do we make sense of the Digital Twin? Through AI?



At www.smartcitystarterkit.com you will find 5 years of Living Lab experience packaged in a freely available downloadable combination of policies, research paper and software.



If you have any questions, especially related to what you want to learn or what you can share, please contact your facilitator CeesJan Mol (+31 6 473 642 56)

Or send an email to:

ceesjan@venturespring.biz

Where is the CityLab located?

You will find it above the Erfgoedhuis (Heritage Center), which is located at:

Gasfabriek 2
5613 CP Eindhoven



Is it far away from the hotel?

No. According to Google, it's a 6 minutes walk.



Get in touch!

[Tinus Kanter](#), Dutch Institute for Technology Safety & Security (DITSS)

[Rick Schager](#), municipality of Eindhoven, ICT department, system architect

Jan-Joost van Kan (ATOS), through [Fethawi Mehari](#) (ATOS, Sweden)

[Osman Khan](#) (ex-Philips, O. Khan Consulting)

[Michiel Oomen](#), municipality of Eindhoven, Spatial Domain

[Deniz Tuzcuoglu](#), PhD student Eindhoven University of Technology

[Carolien van Hout-Van Delft](#), Brink Group

Likely to join us, are

[Robert Metzke](#) (Royal Philips, Chief of Staff Innovation & Strategy, Global Head Sustainability)

[Finn Vossen](#) (Brink Group)

If you still haven't read enough and you want more...

In Eindhoven we have experienced the value of Living Labs: only through doing can you learn what you need to learn in a transformation into something completely different, like 'digital'. Yet, operating as a Living Lab just within reach of a municipality, also has its challenges: the people left behind don't learn, the solutions that are created are therefore 'alien' to the organization left behind and integration at a later stage therefore becomes a problem.

Ultimately, a Living Lab therefore answers the important question 'Can we get this to work?'. What it does not do, is answer the questions 'What needs does it address in society or with people?' and 'How do we get it to them in a form that they will accept and appreciate?'.

What we are currently exploring, based on a brainstorm by Brainport Development, Creative Ring and Philips, is the notion of an 'innovation hub' consisting of (one or more) Living Labs, Impact Labs and ScaleLabs.

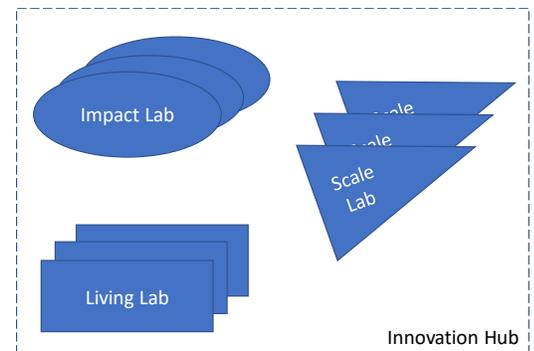


The village, home of the rebels against The Empire.

"In Europe, we will have to figure out what it is we want do do. Do we want to continue giving ourselves over to Silicon Valley? Do we want to wait for the dragon behind the Chinese Wall to wake up? Or do we want to create an alternative together, that will work for us, that will reflect or values?"

Mary-Ann Schreurs, former Alderman Brussels, OASC Conference, 2018

Have you had similar experiences with Living Labs? Are you considering similar extensions to its approach? Do the additional questions we have formulated make sense?



Do you want to explore Innovation Hubs with us?

