

# DIGITAL TRANSFORMATION AND LIFELONG LEARNING (DTL3) & INDUSTRY

Merja Bauters,

Research Professor in Digital Transformation & Lifelong Learning (DTL3),

School of Digital Technologies, Tallinn University

Narva mnt 25, 10120 Tallinn, Estonia +372 5689 6998

<https://dt-ll.eu/> | [www.tlu.ee/en](http://www.tlu.ee/en)

# OUR TEAM & CURRENT COLLABORATORS

## Research Team

- Juunika Koolitus, CitizenOS,
- Biotoopia, Elektronart & BCS Koolitus



Merja Bauters  
Research Professor



Nuno N. Correia  
Research Associate Professor



James Sunney Quaicoe  
Postdoc Fellow



Abiodun Ogunyemi  
Postdoc Fellow



Juri Mets  
Junior Researcher



Mahesha De Silva  
Junior Researcher



Anmar Salmon  
Junior Researcher



Marwa Soudi  
Junior Researcher



Merily Mürsepp  
Cooperation Coordinator with  
Companies



Darja Tokranova  
Junior Researcher



Riaan Bothma  
Junior Researcher



Anar Abilakimova  
Junior Researcher



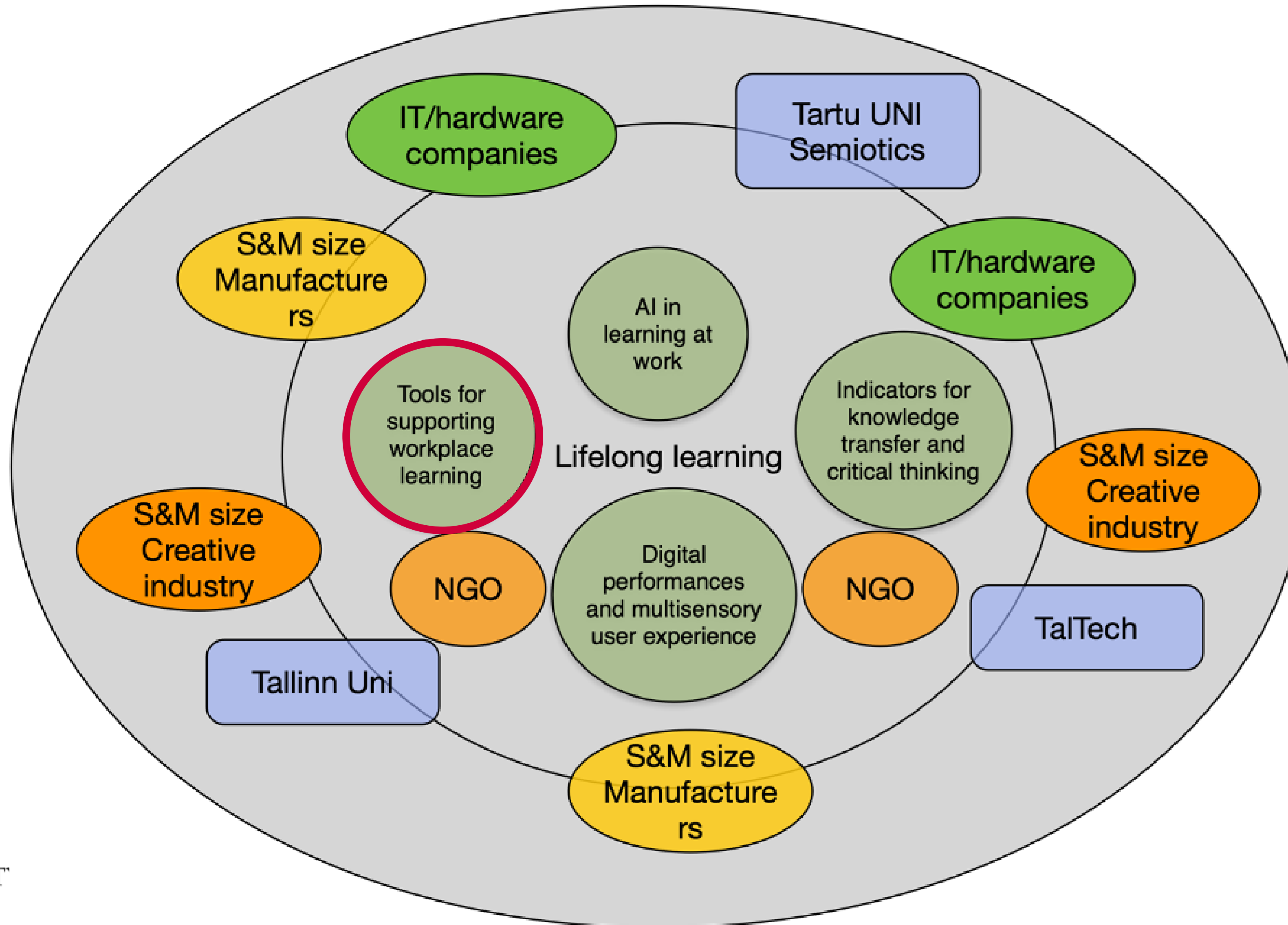
# OUR RESEARCH FOCUS:

- A. Workplace learning,
- B. Various methods for culture and process changes in cross-sectoral ecosystems;
- C. Development of indicators to understand actual change
- D. Co-design of emergent tools with creative industries.

Our research goes beyond user-centric design to see the system within which workers, citizens, companies, and the environment play equal roles!

# OUR RESEARCH FOCUS:

## Cross-sectoral Ecosystem





# WORKPLACE LEARNING



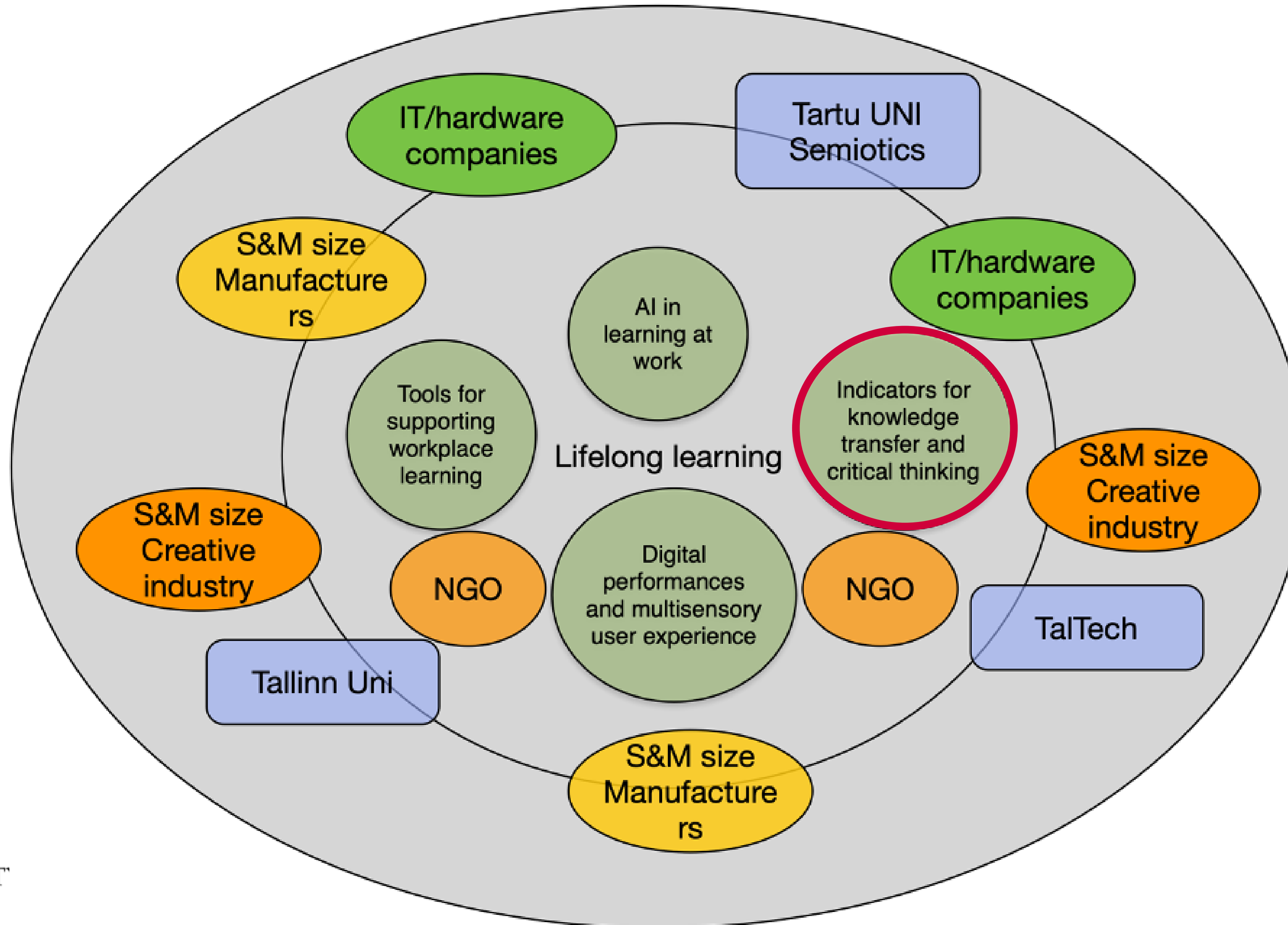
- Situated learning
- Voice controlled listening of learning materials
- Annotation by voice
- Learning while doing routine work





# OUR RESEARCH FOCUS:

## Cross-sectoral Ecosystem



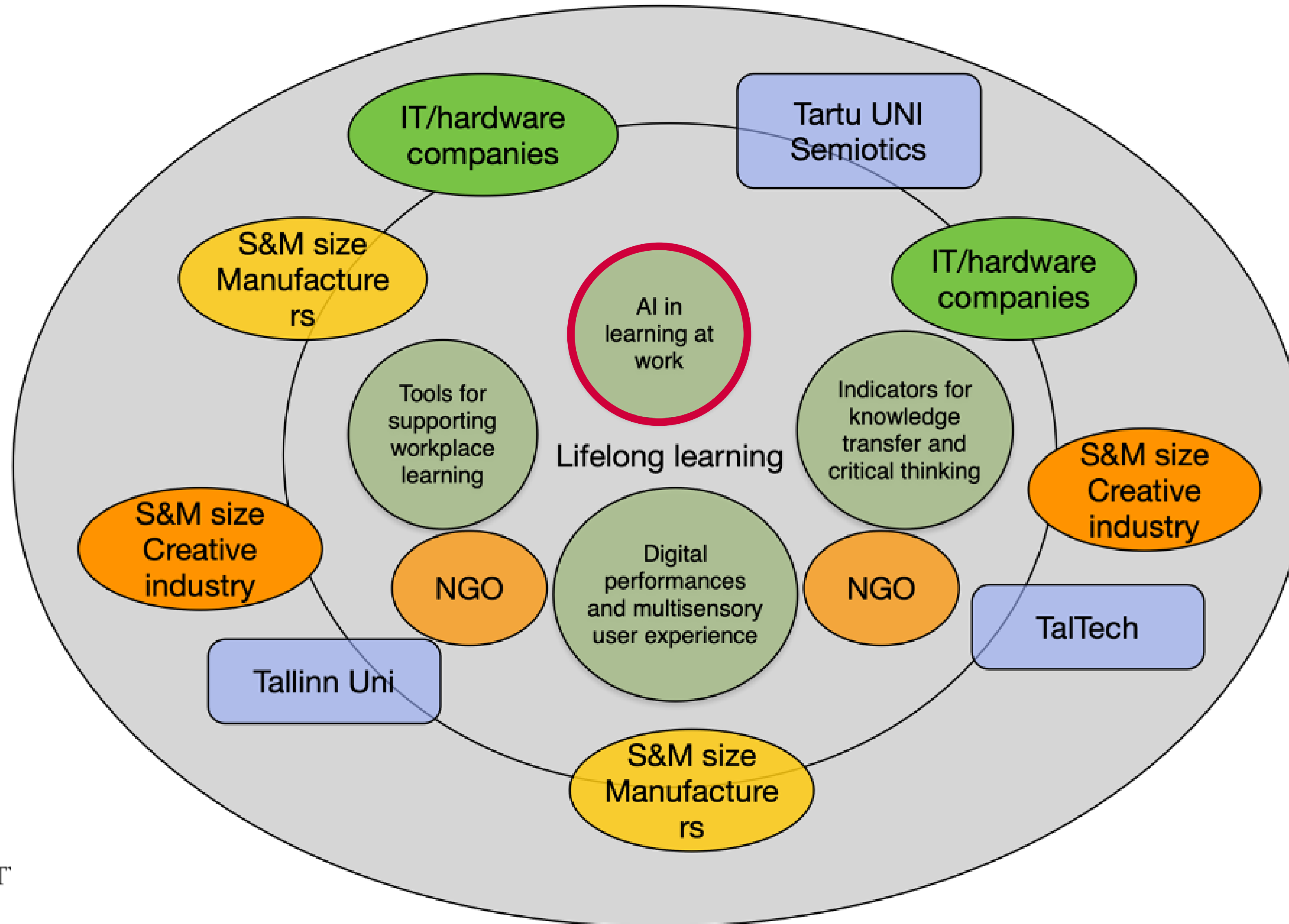
# INDICATORS

- Critical thinking indicators, learning to use reasoning
- Knowledge transfer surveys
- Creativity transformation method

Item	muuttuja/variable	viite
When I am working on some activities, I can do them without thinking about what I am doing. can we ask to lits some practices? (the above is a nice question)	HABITUAL ACTION	David Kember , Doris Y. P. Leung , Alice Jones , Alice Yuen Loke ,
(In this course we do things so many times that I started doing them without thinking about it.)	HABITUAL ACTION	myös: David Kember , Jan McKay , Kit Sinclair & Frances Kam Yu
While listening podcasts I sometimes realise/wake up to the fact that my curent practice is different (As long as I can remember handout material for examinations, I do not have to think too much.)	HABITUAL ACTION	
I can listen the materials from podcasts/readouts and still do my usual practices		
If I follow the course materials which are related to my work tasks I do not have to/ think too much on this course./ struggle too much to adapot the diff	HABITUAL ACTION	
The course makes me ponder/think/wonder about my practices		
The practices that were presented provided answers to real problems in my work	TRANSFER OF LEARNING	
The course provided potential applications to these activities in my work - list of activities, open answer?	TRANSFER OF LEARNING	
The course contributed to my professional development.	TRANSFER OF LEARNING	
The concepts taught in the course make sense to me.	UNDERSTANDING	
I got a grasp on concepts taught in the course, but they do not relate to my personal experiences.	UNDERSTANDING	
I need to refer/go back to the course material in order to perform / for performing the practical tasks.	UNDERSTANDING	
In this course one/I have to continually think about the material (you are being taught.)	UNDERSTANDING	
I sometimes question the usual ways of doing things and try to think /do / and do it in a better way/ of a better way.	REFLECTION	pre? (taipumus kriittiseen ajatteluun)
I like to think over what I have been doing and consider alternative ways of doing it.	REFLECTION	
I often reflect on my actions to see whether I could have improved on what I did.	REFLECTION	can we use change or make other alternatives sich as make it eas
I often re-appraise my experience so I can learn from it and improve/change for my next performance.	REFLECTION	
<b>As a result of this course I have changed the way/I ee my practices/I have done some of my practices/ I look at myself.</b>	<b>CRITICAL REFLECTION</b>	post? (muutos ajattelussa) kurssin kysymykset
<b>This course has challenged some of my firmly held ideas.</b>	<b>CRITICAL REFLECTION</b>	
<b>As a result of this course I have changed my normal way of doing things/ I am trying to chnage some of practices</b>	<b>CRITICAL REFLECTION</b>	
<b>During this course I discovered faults in what I had previously believed to be right.</b>	<b>CRITICAL REFLECTION</b>	
I hoped I could have listened the same time I was doing the practices to see clearer what I might need to change in the	Audiorelated	
Going back in the material while doing things helped me to start to question some of practices	Audiorelated	
I listen radio while working		
Do you enjoy listening podcast while working	Audiorelated	
Post		Non audio Post
Listening the material while doing my activities helped me to realise the need of change	Audiorelated	I wished I could have been listening the material while doing my ac
I listen podcasts while I work /	Audiorelated	I lwould have liked to listen podcasts while I work
Bookmarking audio did not intervene my pactise	Audiorelated	I missed bookmarking the things I listened allow to mark n
Annotating audio did not intervene my practice	Audiorelated	I missed annotating content I listened allow to mark n

# OUR RESEARCH FOCUS:

## Cross-sectoral Ecosystem





# XAI USED FOR LEARNING IN WORKPLACES

- Research on discrepancies on ethics, expected outcomes, challenges, responsibilities
- Come to our workshop:
- WUD or 29th /30th of November

## An open invitation to companies planning to integrate AI systems into their work regime

Explainable Artificial Intelligence (XAI) aims to understand how AI decision-making occurs. The problematic point is where human intervention might be needed. The descriptions are essential for any layman using AI because algorithms can pose bias, unfairness, and discrimination. Still, if algorithms are fair, unbiased, they can help and support various activities, such as inside company learning.

As a company interested in AI, we invite you to participate in a free session where we first wish to learn your experiences and challenges. We present and explain how AI can be defined from various perspectives, the current guidelines, and what these mean in practice. The session includes workshops, providing guidelines and in-depth discussion with those who are available. The event is organised by Tallinn University's School of Digital Technologies research team of Digital Transformation and Lifelong Learning. We do not share your private information.

### The themes are:

a) Feelings about AI, b) Expectations for AI, c) Insecurities/challenges, and d) Future expectations.

### Who can participate?

Estonian companies who are planning to integrate AI systems into their work.

### Why should I participate as a company?

Participating companies will be the first to try out our research group's solutions which aim to support the understanding of decision making and the practical ethical guidelines. Following the workshop, we give an introductory online training session where we explain the trends, guidelines and reports recently released by the EU regarding the regulations controlling the deployment and usage of Explainable AI systems inside private and public organisations.

If you are interested in joining us, please choose your preferred date by filling this form:

<https://forms.gle/wKJyLJsPe4uTdUVp6>

## Workshop: AI as a partner in learning

📅 November 23, 2021 at 12:00

€ 180 €

📍 Tallinn University, Narva mnt 25, Tallinn, Estonia

Buy now >

### Introduction

Algorithmic systems (often plainly called AI) are already used in various commonplaces, which we do not even think that much, such as email systems, Microsoft Word office package, etc).

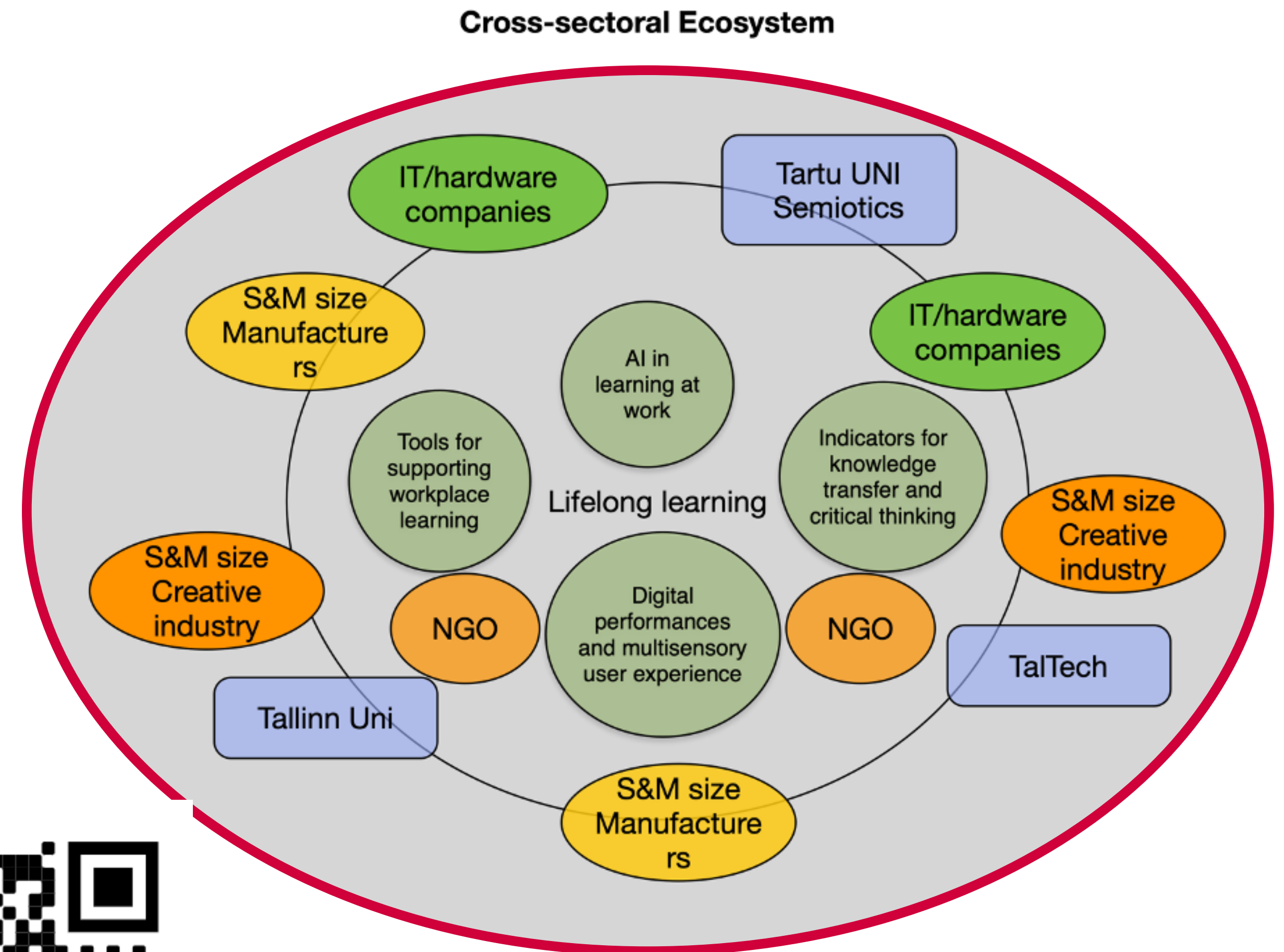
However, when it is implemented into workplaces to support and enhance workers learning, development and skill upscaling do we know what it means? What data the system will use, for what and how? Is it used ethically or does it have implicit other kinds of aims, for instance, ranking workers, or providing them more options for self-development?



# COME AND BUILD THE CROSS-SECTORAL ECOSYSTEM WITH US!

- We need a space where we can all meet - suggestions?
- We call it currently: Cross-sectoral ecosystem - other names welcome - suggestions?

[www.menti.com/b3jqqw9h6s](https://www.menti.com/b3jqqw9h6s) CODE: 3207 1400





CONTACT US IF YOU ARE INTERESTED IN COLLABORATION?



Merja Bauters +372 5689 6998,  
[merja.bauters@tlu.ee](mailto:merja.bauters@tlu.ee)



Merily Mürsepp + 372 6409 422,  
[merily.muursepp@tlu.ee](mailto:merily.muursepp@tlu.ee)



AITÄH!  
QUESTIONS?