



VISION

2020-2025

TU/e

iINNOVATION
SPACE

Preface

This document is the vision and business case of TU/e innovation Space 2020-2025.

Firstly, it addresses a shared vision on the role and positioning of TU/e innovation Space as an expertise center at TU/e.

Secondly, it describes our portfolio, plans, activities, services and outputs in our 'businesses' Challenge-Based Learning education, entrepreneurship, extracurricular activities, community building and enablers.

Finally, it proposes the future communication and evaluation plans.

This document has been composed in close and fruitful collaboration between management and staff from TU/e innovation Space, the TU/e Financial and Economic Affairs department, the deans of the Bachelor College and Graduate School, the Head Education Policy, and others.

This document has been reviewed and approved by the Executive Board of the university.

Eindhoven, January 2020

TU/e

TU/e Innovation Space
Equipment & Prototype Center



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Vision derived from TU/e Strategy 2030

TU/e aims “to educate Engineers for the future with a T and n shaped profile, who can study in personal learning paths with ample freedom of choice, thereby shifting the attention from teaching to learning and offering Challenge-Based Learning with real-life challenges”¹. Engineers of the future have an entrepreneurial attitude and are skilled and prepared to take on important societal, technical and scientific challenges, cooperating with and within innovative ecosystems. Therefore, TU/e wants to “be a connected university. It aims to connect to its academic partners, like the Utrecht-Wageningen-Eindhoven Alliance and the EuroTech Universities”, and additionally “education partnerships are reinforced with vocational institutes and universities of applied science, like SUMMA, Fontys

and Avans”. Additionally, TU/e wants to “develop and intensify collaboration with industry, with new type of public-private partnerships, between scientific findings and commercial development and it wants to enhance the impact of technology”. TU/e also aims to “engage industrials in education”. Furthermore, TU/e aims to “strengthen challenge-based cooperation, aiming to involve students and staff of various institutions in our challenge-based education facilities such as TU/e innovation Space and the Eindhoven Engine. Students, graduates and R&D professionals will work together in teams of various nationalities, disciplines, levels of education and cultural backgrounds. This creates an optimal experience for students and a maximum involvement of talent”.

In line with TU/e strategy, TU/e innovation Space is the center of expertise for Challenge-Based Learning and student entrepreneurship at TU/e. It is a learning hub for education innovation and an open community where students, researchers, industry, and societal organizations can exchange knowledge and develop responsible solutions to real-world challenges.

TU/e innovation Space falls under the Governance of the Education Board which is responsible for the development and implementation of Challenge-Based Learning (CBL) and student entrepreneurship (see **figure 1**); the scientific director of TU/e innovation Space is a member of the CBL-taskforce. TU/e innovation Space facilitates experiments on (interdisciplinary) CBL and student entrepreneurship; offers an environment for studying (interdisciplinary) CBL and entrepreneurship; offers services, workshops as well as information and inspiration for implementing CBL on campus; and coordinates student entrepreneurship on campus. The activities of TU/e innovation Space are performed in close collaboration

with the responsible lecturers in departments, their quality control via education and exam committees, and the services offered by ESA, DPO, CEC, DAZ, and others. Connections with the departments are also formally organized through a network of ambassadors in the departments. The activities of TU/e innovation Space are also performed in close collaboration with students, via direct contact with students in courses, the student assistants’ part of the core team of TU/e innovation Space, and the student teams and start-ups in close proximity to TU/e innovation Space. The 4TU.Centre for Engineering Education (4TU.CEE) is responsible for research projects on CBL.

¹ TU/e (2018). TU/e strategy 2030. Drivers of change. Eindhoven: TU/e

TU/e innovation Space Governance Scheme

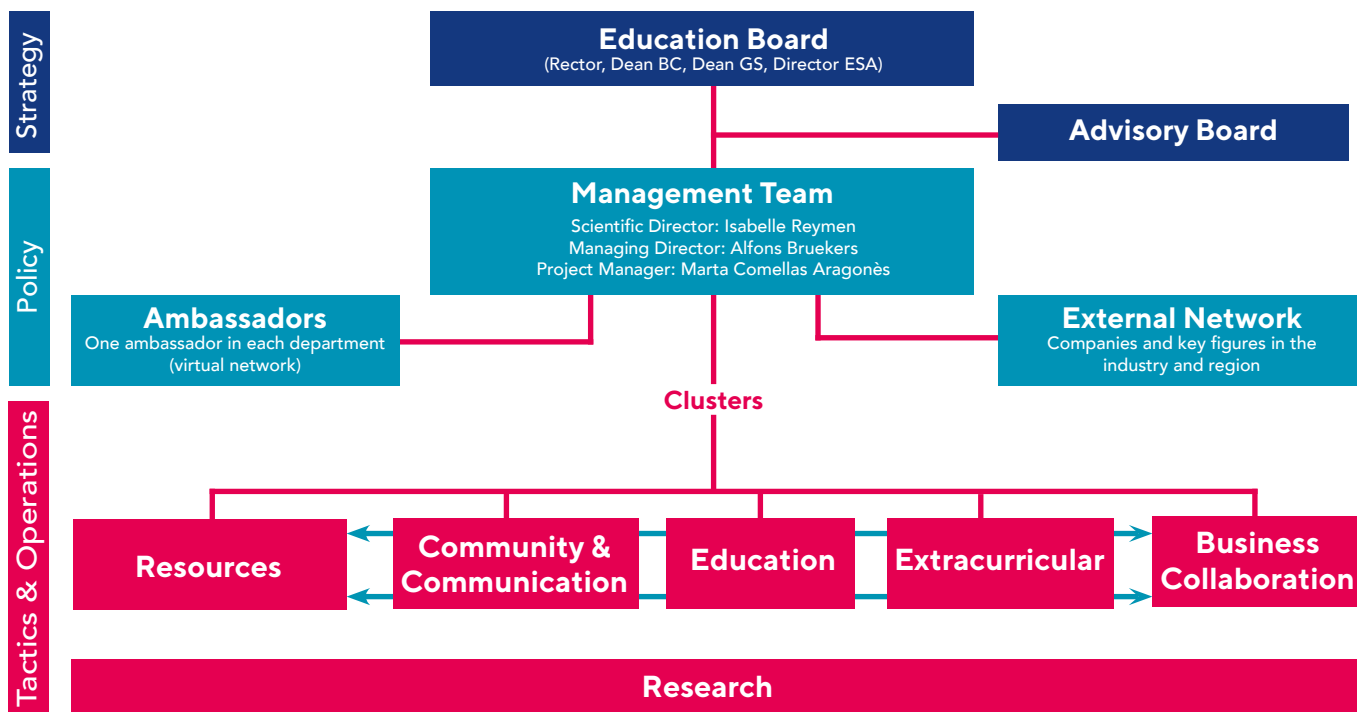


Figure 1 Governance scheme

Main activities of TU/e innovation Space



Co-develop and research the viability, desirability and feasibility of Challenge-Based Learning (in an interdisciplinary context).



Facilitate a new type of collaboration with industry, by linking education closely to practice and facilitate students to have real impact with their projects. TU/e innovation Space offers challenges on interdisciplinary research themes, in close collaboration with researchers, teachers, research institutes and external partners.



Inspire and create awareness of entrepreneurial behavior, facilitate entrepreneurship education, coordinate and offer a learning environment for student entrepreneurs and student teams on campus.



Form a community where students and researchers from different disciplinary backgrounds meet and collaborate on innovations that address real-world challenges from researchers, companies, institutes, and societal organizations in the region and beyond.

TU/e innovation Space strives to perform these activities in close collaboration with all involved stakeholders; in hands-on and pragmatic way; entrepreneurial; continuously reflecting, learning, and improving; and professional, with high quality standards, aiming for world top.

Domains of TU/e innovation Space

Derived from this vision, TU/e innovation Space focuses its activities on the following four domains and one enabler:

Domains

- 1** Challenge-Based Learning education
- 2** Entrepreneurial awareness and education
- 3** Extracurricular activities, start-ups, and student teams
- 4** Community building and student connection with ecosystem

Enabler

The domains above are intertwined and in combination they also need an enabler:

- 5** Management, office and technical facilities

This will be elaborated on in the next paragraphs and an overview of the Goals associated to each of the domains and enabler is described in **table 1** on the next page.

Table 1 Overall goals of TU/e innovation Space

Domain	Goals
Domain 1: Challenge-Based Learning education	<ul style="list-style-type: none"> A. Facilitate (interdisciplinary) CBL on campus with processes and facilities. B. Facilitate (interdisciplinary) CBL by connecting students, staff and external stakeholders like companies, government, artists, and wider public. C. Support pilots on campus-based educational innovations. D. Support learning in themes connected to researchers, industry and society. E. Share best practices and research on challenge-based educational innovations and entrepreneurship on campus by connecting all involved staff. F. Provide evidence that CBL is a sustainable model for engineering education, together with ESoE, ESA, DAZ, etc. G. Offer a common facility for researchers to study activities related to interdisciplinary CBL and entrepreneurship and facilitate access to data related to innovation Space.
Domain 2: Entrepreneurial awareness and education	<ul style="list-style-type: none"> A. Facilitate the creation of more entrepreneurial awareness and an entrepreneurial mindset among students. B. Offer all students on campus the possibility to create value for society. C. Support pilots on entrepreneurial mindset creation on campus.
Domain 3: Extracurricular activities, start-ups, and student teams	<ul style="list-style-type: none"> A. Facilitate the emergence and safe development of student teams, student start-ups and extracurricular projects on campus and support them with processes and facilities. B. Facilitate peer learning among students in project teams. C. Create and promote links as well as embedding between extracurricular and curricular activities.
Domain 4: Community building and student connection with ecosystem	<ul style="list-style-type: none"> A. Initiate and facilitate activities and events that bring together the different stakeholders involved in entrepreneurial education and CBL. B. Facilitate an active innovation community with peer learning among students, teaching staff, researchers, and external stakeholders.
Enabler: Management, office and technical facilities	<ul style="list-style-type: none"> A. Facilitate interdisciplinary CBL and entrepreneurship education with infrastructure, equipment and administration. B. Support the internal team of TU/e innovation Space with HR, financial and administrative services, so that the core team works efficient and cohesive. C. Managing TU/e innovation Space within constraints of time and budget, collecting metrics etc.



Winner of Challenge-Based Learning June 2019
TU/e innovation challenge

Team: SPACE SEA
Subject: SATELLITE DATA LINKING SEALED TANKS
Case owner: NSO

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1

Challenge-Based Learning education

Challenge-Based Learning education

TU/e innovation Space has expertise on CBL, facilitates peer learning among teachers and all other stakeholders involved campus-wide, creates insight into the complexity by facilitating experiments and evidence-based research, and facilitates the dissemination of the lessons learned on campus and in the outside world. More specifically:

Students

TU/e innovation Space offers students the possibility to perform interdisciplinary challenge-based courses and BEPs (Bachelor End Projects)² on campus, a new type of intensive and small-scale education. Therefore, it promotes interdisciplinary CBL to (upcoming) students during promotion activities like the Intro week, Master Kick-off Challenge day, check your match, and Open Days. We offer an attractive and stimulating environment that is not linked to a specific department and where staff from diverse disciplines can find each other to collaborate, which is exemplar behavior

to the students. It is also a unique central prototyping facility (with technical advice, infrastructure and equipment) available for students from all programs. Furthermore TU/e innovation Space facilitates the employability of students, by offering an environment where students can easily move across the boundaries of academy and the “real world”, and offer additional skills development workshops (innoApproach³), and advice on portfolio development (in progress). Students are also invited to offer challenges to be worked on in different courses and to coach in CBL projects.

Lecturers

Together with ESA and DPO, we inspire and support lecturers with course design and execution, through coaching, developing templates to be used by lecturers, and offering course design workshops and training programs for staff (e.g. UTQ). We support lecturers by collecting challenges for use in different types of courses, we facilitate resources for and promotion of courses (organization of educational events like ‘kick off’- and ‘final’-presentations and help to attract students from different departments), and we facilitate extra evaluation of the CBL

courses. Processes and procedures are being set-up and continuously improved. TU/e innovation Space facilitates interdisciplinary Challenge-Based Learning experiments in which lecturers from different disciplines collaborate (e.g. ISBEP, E3 and more to come). With its services, TU/e innovation Space also decreases workload of TU/e staff involved in CBL. In addition, the openness and flexibility of the building also provides insight into what the educational spaces and facilities might look like in the future.

Challenges

TU/e innovation Space collaborates with external parties like companies, governments, and artists, in order to collect challenges. Instead of collecting challenges ad hoc, we aim for long-term collaborations and to take a more pro-active role in developing a coherent portfolio of challenges. We aim to create more continuation of challenges and also offer challenges on different themes, such as energy transition, intelligent lighting, agro-food and tech, artificial intelligence, etc., which will also create more visibility of the challenges and projects. We aim for themes that are connected to the Sustainable

Development Goals and that need to be solved in interdisciplinary teams. We will, therefore, collaborate with research institutes, Eindhoven Engine, and academic staff performing cross-disciplinary research to collect these challenges. TU/e innovation Space can thereby facilitate setting up a new type of public-private partnerships, by having access to students working in interdisciplinary teams on responsible solutions to real world-challenges (in curricular and extra-curricular projects, see **Domain 3** as well). For students, it offers the experience of working in relevant ecosystems. For teachers, it thereby

² <https://studiegids.tue.nl/verbreding/innovation-space/bachelor/isbep-innovation-space-bachelor-end-project/>

³ <https://studiegids.tue.nl/verbreding/innovation-space/workshops-innoapproach/>

facilitates collecting relevant challenges and developing collaborations, linked to their own research topics. The students working on these challenges can help them to develop prototypes to demonstrate value, valorize their research, and contribute to social and economic impact. Ideally, TU/e innovation Space creates an environment where students, researchers, and external stakeholders will work together on challenges in teams of various nationalities, disciplines, levels of education, and cultural backgrounds.

Additionally, TU/e innovation Space is engaged in experiments with parties outside the university, like Wageningen and Utrecht for a joint challenge, with 4TU, with vocational institutes and universities of applied science (such as SUMMA, Fontys and Avans), and in the Eurotech alliance and thereby showcase TU/e's performances on CBL to the external world. It also develops materials to disseminate CBL in the relevant external networks.

Evidence based research

The central services and facilities of TU/e innovation Space also offer the basis to perform evidence-based research on CBL (e.g. what are key characteristics of CBL; what works and what doesn't). TU/e innovation Space is currently already involved in research into redesigning the assessment of innovation Space Bachelor End Project (ISBEP²), and on modular and interdisciplinary education.

A roadmap will be developed, in close connection with the taskforce CBL, on the needs for further experiments and evidence-based research. It also offers an environment for researchers to work in Matrix and collect data, as well as to perform and evaluate interventions with students, staff and external stakeholders.

Future

If the upscaling of CBL requires growth and transformation regarding space and equipment to accommodate a different type (and eventually more) of courses and projects (see also **Enabler**), TU/e innovation Space can still grow in Matrix (towards 50.000 ECTS max) if we incorporate the lecture rooms in Matrix (now not coupled with TU/e innovation Space education). On Timeslot A the current capacity of our own rooms is already achieved. For the long term, we

foresee growth in other education rooms on campus, e.g. in Atlas flat lecture rooms or in rooms coupled to research institutes and coordinated from within the Matrix building. In 2021 we also aim to hire an additional policy advisor to further develop our key services. Further growth of CBL education facilitation is expected to increase in kind with people from e.g. the departments, ESA, DPO, CEC, DAZ.

Objectives 2021

- Facilitate the set-up of E3 (Support the development of a large-scale, cross-disciplinary experiment)
- Define program plan CBL and role TU/e innovation Space 2020-2025
- Facilitate and support CBL initiatives in all departments
- Monitor all experiments through educational research, in order to ultimately arrive at evidence-based working methods.
- First teacher support/training program for CBL in place (in collaboration with ESA, DPO and other stakeholders) (CBL teaching professionalization will have begun)
- Set up connection/collaboration with research institutes and programs (for challenge collection and/or educational innovation research)
- Come up with first business models to fund extra efforts required for CBL

Objectives 2025

- Create insight in how CBL can be used in on-campus education
- Create insight in how a curriculum of CBL and knowledge modules can be developed
- Create insight in how to best shape CBL-based assessment
- Create insight in how educational support and organization can be structured around the educational concept of CBL
- Create insight in what skills teachers need for CBL and how they can be supported in its development
- Create insight in how further roll-out of CBL can be optimally organized



2

Entrepreneurial awareness and education

Domain

Entrepreneurial awareness and education

TU/e innovation Space aims to facilitate entrepreneurship education on campus. An entrepreneurial mindset is a key attitude of the engineer of the future, is essential in CBL, and is key in the learning goals of a student at TU/e (see **Figure 2**) (this has a link to all other domains).

Entrepreneurship education

In the end of 2019, a study was started by the IE&IS department by request of the TU/e Executive Board to investigate entrepreneurship on campus. In line with the results and background of this study, TU/e

innovation Space aims to set-up and execute a program for student entrepreneurship on campus and appoint a program manager for entrepreneurship who will coordinate all student-entrepreneurship activities.

The main goals and activities of such a program which should be coordinated by the program manager are to:

- stimulate innovations in entrepreneurship education (e.g. redesign the USE learning line Technology, Entrepreneurship towards CBL),
- define entrepreneurial mindset in terms of value creation for society,
- create an overview of all curricular (USE, BSc and MSc courses and lecturers, PdEng) and extra-curricular activities (student start-ups, student spinoffs, TU/e contest and other contests TU/e participates in),
- strive for maximal integration and alignment of extracurricular and curricular activities and connect to valorization activities on campus,
- be the first contact point for student IP and other related issues,
- coordinate an entrepreneurial coaching network,
- have an overview of entrepreneurial activities in the region and write proposals to innovate our activities.

Aalto Venture Program can be of inspiration to set-up the program and activities.⁴

Research

The central services and facilities of TU/e innovation Space also offer the basis to perform evidence-based research on student entrepreneurship, entrepreneurial mindset development, the creation of value for society, entrepreneurial teams, and students'

connection with the regional entrepreneurial ecosystem. We are currently involved in research into student entrepreneurship and on the concept of TU/e innovation Space in an entrepreneurial university (e.g. Ph.D. research by Marisol Velasco Montanez).

⁴ <https://avp.aalto.fi/>

Future

Depending on the outcomes of the current TU/e discussion on ownership, embedding and organization of entrepreneurship, we will calibrate our future ambition level in TU/e innovation Space. We will start with appointing a program manager for entrepreneurship.

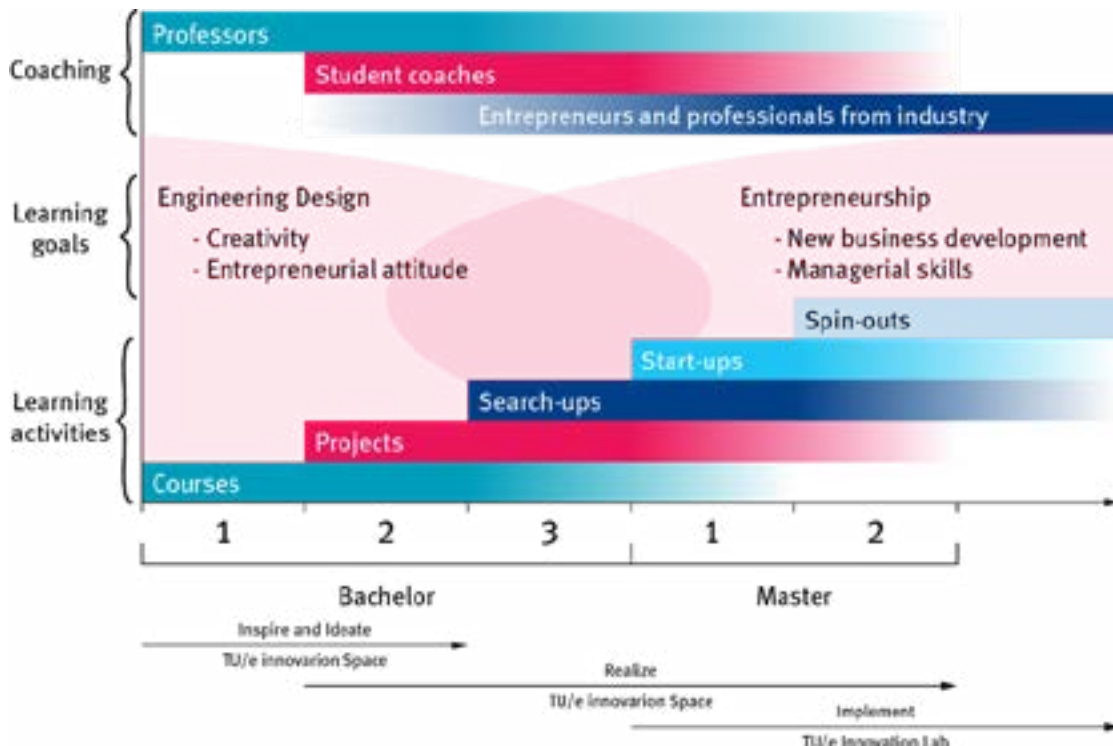


Figure 2 Learning line on interdisciplinary challenge-based and entrepreneurial education.

Objectives 2021

- Framework entrepreneurial education ready
- Program plan for TU/e innovation Space to support entrepreneurship education on campus
- Frontrunner in entrepreneurial education
- Program manager for entrepreneurial activities in place

Objectives 2025

- Framework implemented in all departments
- New USE course in entrepreneurship in place

3

**Extracurricular activities,
start-ups, and student teams**



Domain

Extracurricular activities, start-ups, and student teams

TU/e innovation Space aims to offer an environment where student teams and start-ups on campus feel inspired and supported and where links between curricular and extracurricular education are built. Student teams and the way they learn and develop in their projects have been our inspiration since day one in regard to CBL and entrepreneurship education (**Domains 1 and 2**). As an expertise center that builds expertise and experience in CBL and entrepreneurship education, having student teams, start-ups and entrepreneurs in the same environment seems to be the best combination for inspiration and collaboration. Furthermore, combining CBL and entrepreneurship education leads to entrepreneurial activities like start-ups and student teams (see **figure 2**).

Current teams and extracurricular activities in TU/e innovation Space

TU/e innovation Space already hosts many teams⁵: some with a commercial purpose (start-ups), some with a non-commercial purpose (student teams), and some developing themselves in between. These teams offer a glimpse into how students already deal with their challenges, what they

learn and what their needs are (also see the link with **Domain 1 and Domain 2**). This has already resulted in the organization of workshops such as the innoApproach⁶ (now also in My Future) and Springplank⁷, both joint programs for students performing curricular and extracurricular activities.

Environment

TU/e innovation Space offers students a safe learning environment where they can fail and learn the skills needed for their career, where they can contribute to grand societal challenges and have impact, where they can continue and bring forward the ideas and projects initiated in courses, where they grow a network of fellow students engaged

in similar topics, and where they are linked to entrepreneurial innovation ecosystems in which they can excel and which can speed up their development. We also connect them to courses as challenge owners, stimulate them to follow our courses as students, or coach in these courses.

⁵ <https://www.tue.nl/en/tue-campus/tue-innovation-space/projects/>

⁶ <https://studiegids.tue.nl/verbreding/innovation-space/workshops-innoapproach/>

⁷ <https://studiegids.tue.nl/verbreding/innovation-space/innovationspace-springplank/>

Process

There are processes in place for scouting, selecting and evaluating all our teams. In monthly meetings with team leaders, problems and needs of our teams are inventoried (these vary from help with IP, finance or subsidy issues, recruitment of new team members, and housing, to entrepreneurial coaching and well-being issues). We aim to professionalize processes and coaching for these project teams by collaborating with others on campus, offering a space to experiment and share experiences. We will

initiate a couple of activities ourselves and share our findings and collaborate with ESA or others on campus already supporting student teams. For example, for issues related to students' high stress levels, we want to create space for relaxation and fun in the building, an innoApproach dedicated to it, and a Slack channel for the purpose of relieving this issue. We also started with setting up a "Guru network" with experienced external coaches (for free). Furthermore, we want to promote more peer learning (link to **Domain 4**).

Future

Some of the teams in TU/e innovation Space are also official TU/e student teams. We believe it is wise to bring all teams on campus together in one community and under one central organization (obviously not necessary in one location). That way, peer learning will increase (younger teams already ask us to be able to learn from more experienced teams) and the coordination costs at TU/e level will reduce (central at one organization instead of two or more separate organizations). This ambition is not yet budgeted. While at the

moment student assistants are running the processes mentioned above, we currently need a project team coordinator who coordinates all processes and activities related to student teams. That person can also help in making the transition of the two "systems" related to student teams on campus ("Stuurgroep studententeams" and related activities; and the processes and teams in TU/e innovation Space), into one new "system".

Objectives 2021

- All student teams and start-ups are aware of support offered by TU/e innovation Space
- All student teams and start-ups on campus share a central community (in TU/e innovation Space)
- Develop a set of programs and activities to facilitate for student teams and start-ups to be involved in curricular activities (BEP, MSc Thesis, or innoSpace project)
- Have a well-organized collaboration with the Alumni Relations & University Foundation
- Peer learning program in place

Objectives 2025

- Coaching program for student teams and start-ups implemented in TU/e innovation Space
- Have a proposal in place to reward extracurricular activities



4

Community building and student connection with ecosystem

Community building and student connection with ecosystem

Next to being an expertise center, TU/e innovation Space also aims to be a learning hub for education innovation and an open community where students, researchers, industry, and societal organizations can exchange knowledge and develop responsible solutions to real world-challenges. Therefore, part of our effort is dedicated to building and growing different communities and facilitate the connections and interactions between them. The education of the future involves networks and collaborations with different disciplines and stakeholders more than ever. Therefore, we also believe that we should investigate what type of space and events facilitate these connections. We want to experiment with community building by being a place where the university can further learn from having communities and community events.

Need for a community

A community creates and promotes responsibility, commitment, and collaboration. For example, students in our community help in events, info days, organize community events for others, participate in innoApproach as speakers, and spread the word. Communities are also essential for entrepreneurship, as they are a source of inspiration and new collaborations; entrepreneurs can learn from each other's mistakes and can exchange tips. In communities, networks are also shared, which is essential to innovate (Daria Tataj

calls it "networking power"⁸). A community can facilitate peer learning: members of the community help each other, going from coaching to peer-coaching happens naturally. We bring together people with complementary interests (e.g. students in curricular and extracurricular activities, industry partners, teachers, support staff and researchers). Motivation is increased when contact is made at personal level in events. The tighter the community, the higher the level of the collaborations in learning.

Communities

TU/e innovation Space already created an active community with its project teams (link to **Domain 3**). They learn from each other and inspire each other in a safe environment where they can also fail and share their learnings. Separately, we also organize activities for staff interested or engaged in CBL at our university (link to **Domain 1**). Next to that, we created a network of external stakeholders that are linked to us as a challenge owner, partner of a project team, TU/e Contest partner, coach (in the Guru network) or others.

On the short term, we also aim to support a community linked to **Domain 2** (especially student entrepreneurship). Overall, we aim to facilitate all these communities further and also link them among each other. Ideally, we aim to facilitate an active innovation community with collaborations among students, teaching staff, researchers, research institutes, innovative service employees, EPC and labs on campus, and external parties like

start-ups, SME, OEM, service providers like banks, funding agencies, incubators and accelerators, government, investors, campuses like HTC, Automotive Campus, Brainport Industries Campus, Strijp S, artists, and designers, connected in thematic events or other. The home for this community is the Matrix building: by letting people meet in a vibrant building, a lot of knowledge and expertise can be exchanged. We also want to be a place where not only educational innovation takes place, but also innovation on the education facilitation. TU/e service departments can experiment and test new processes, service agreements or equipment in TU/e innovation Space. For example, EPC services used by student teams, a project with IMS with pre-testing the digital Samsung flipcharts before deciding their implementation in new buildings in campus, or the testing of a new CRM system together with other departments on campus.

⁸<https://networkthinking.center/>

Tours, visits and events

Part of our activities is promotion/exposure by tours and visits, i.e. showcasing interdisciplinary CBL, TU/e student teams and start-ups, and our open and attractive working space to everyone interested. We also facilitate showcasing the projects of students in TU/e innovation Space at events with external partners like TU/e Contest,

and in external events such as Dutch Design Week, Glow, and the Demos & Drinks network meetings. The number of visits and events we have hosted in TU/e innovation Space has increased in recent years as well as the resources dedicated to this. However, we feel it is one of our tasks to share our learnings and experience with others.

Future

In order to create an active and wide-spread community, we would like to increase the involvement of students in the creation of this community. For the future, we would like to support the creation of a student board that

supports the TU/e innovation Community (inspired by SensUs, Serpentine and Team Energy). We will also investigate what ways of community building works best for the different stakeholders.

Objectives 2021

- Have several events and activities that bring together the different stakeholders involved in entrepreneurial education and CBL
- Set up activities connected to thematic topic lines
- All potential stakeholders involved in CBL and entrepreneurial education are present in our community

Objectives 2025

- Community is organized by a student board
- An online platform in place for the community

5

Management, office and technical facilities



Enabler

Management, office and technical facilities

The enabler *Management, office and technical facilities* in innovation Space makes sure that equipment, space, processes and information are in place to facilitate interdisciplinary CBL (**Domain 1 and Domain 3**), entrepreneurship education (**Domain 2**), and the building of a broad community (**Domain 4**). Additionally, it provides the resources to accommodate each of the activities that happen simultaneously in TU/e innovation Space and it supports and facilitates hands-on learning and prototyping. Finally, it supports the internal organization with HR, office and administrative tasks.

Future

To facilitate the needs/requirements of CBL, entrepreneurial working, student teams, the community, and exhibition, we want to innovate the space (in terms of interior design). Key words for this are flexibility, listening to student's needs, promoting connection of different stakeholders, being

different and original on campus, and also satisfying campus needs and complement what is already available on campus. We therefore foresee that we will have to redesign Matrix and probably need to absorb the shared locations, such as the meeting and lecture rooms.

Objectives 2021

- Facilities, equipment and staff fulfill the requirements of the educational programs.
- A plan is in place to redesign and transform the existing teaching rooms in Matrix to learning spaces, accommodated for the new requirements of CBL and entrepreneurial education.

Objectives 2025

- The transformations of the learning spaces are implemented after evaluation with the corresponding stakeholders in campus.

A group of people are gathered around a table in a meeting room, engaged in a discussion. One man in a blue shirt is standing and pointing at a document, while others are seated and looking at the materials. The room has a blue wall with a network diagram and several pendant lights hanging from the ceiling. The overall scene is overlaid with a green tint.

Future communication and evaluation plan

Future communication and evaluation plan

Looking back at the first two full years of TU/e innovation Space and looking towards the challenges ahead, we have been reflecting on the theme of communication; about the lessons learned, but also about the challenges that are coming up.

The positioning of TU/e innovation Space as a center of expertise, a learning hub and an open community, has major consequences. It means that the number of stakeholders and customers of TU/e innovation Space is very large. Secretary General Joseph Luns once said: "As the Netherlands, we are a small country, but that is precisely why we have a lot of foreign affairs" and that metaphor also applies to TU/e innovation Space. As an expertise center we may be small, but our environment is wide and complex. And there is also a difference in dynamics within that environment.

Because introducing CBL is not only a developmental process but also an organizational change process, parties and partners must be cooperative, enthusiastic, bound and seduced which takes time

and energy. Communication, dosed and tailored to each group of stakeholders, is therefore crucial. Communication is also necessary to monitor the risks mentioned earlier. We are going to work proactively on a communication plan with our governance, educational and support stakeholders on the TU/e campus and, where relevant, also outside of it.

We will regularly evaluate our activities. Therefore, we will collect feedback from all stakeholders on the progress with regard to the different goals of TU/e innovation Space. In monthly meetings with the Education Board of TU/e we check the vision, tactics and plans. Quality control of the education activities takes place via the regular quality control processes in departments, e.g. course evaluations, program committees and exam committees. We will plan an official evaluation in the end of 2021 and 2024, taking the objectives per domain as a basis and checking with the development of the Strategy 2030.



Abbreviation list

4TU	Federation of the four Dutch universities of technology
4TU.CEE	4TU Centre for Engineering Education
BEP	Bachelor End Project
CBL	Challenge-Based Learning
CEC	Communications Expertise Center
CRM	Customer Relationship Management
DAZ	Dienst Algemene Zaken (General Affairs)
DFEZ	Dienst Financiële en Economische Zaken (Financial and Economic Affairs)
DPO	Dienst Personeel en Organisatie (Personnel and Organization)
E3	Eindhoven Engineering Education
ECTS	European Credit Transfer System (studiepunten/study credits)
EPC	Equipment & Prototype Center
ESA	Education and Student Affairs
ESoE	Eindhoven School of Education
HTC	High Tech Campus
IE&IS	Industrial Engineering & Innovation Sciences
IMS	Information Management & Services
IP	intellectual property
ISBEP	innovation Space Bachelor End Project
OEM	original equipment manufacturer
SME	small and medium-sized enterprises
USE	User, Society & Enterprise
UTQ	University Teaching Qualification



 innovationspace@tue.nl
 tueinnovationspace.nl
 @tueinnovationspace
 @tueinnovationspace
 @tueinnovationspace
 @tueinnospace

layout tom cobbenhagen
photos bart van overbeeke (p.2, p. 8, 11, 14, 17, 20)
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