

emp**i**rica

Leadership and governance for an entrepreneurial culture at Aalto University



Aalto University's profile and entrepreneurial approach

Aalto University is a national Finnish project. According to the University President's foreword in the institution's strategy paper, Aalto has "a national mission to strengthen the innovative capacity of Finland through first-class research, art and education".¹ Further to its societal dimension, the University's "vision carries a strong commitment to building a sustainable society driven by innovation and entrepreneurship".

The University's **origin** was already marked by leadership and the intention to drive entrepreneurship through the University.² In 2004, a workgroup led by Anne Brunila from the Finnish Ministry of Finance concluded that Finland had too many higher education institutions.³ They should be consolidated. In the following year, Yrjö Sotamaa, Rector of the University of Art and Design, took up this statement and proposed to merge Helsinki University of Technology, the Helsinki School of Economics and the University of Art and Design Helsinki. This idea received attention within the Finnish Government. A group led by Secretary of State Raimo Sailas presented a concrete memorandum about such a merger in 2007. The Finnish Minister of Education at the time, Sari Sarkomaa, together with representatives of Finnish business and professional organisations, signed the Aalto University charter in June 2008.4 In addition to education and research, the charter mentions business incubation as well as exploitation of research and commercialisation as objectives of the University. In December 2008, the Board selected Tuula Teeri to be the University's first President. In the process of creating the University, the Government rewrote university law to allow the University to acquire an endowment, which would be necessary to achieve its ambitions. The university collected 200 million euros in private donations to which the state added 500 million euros. All in all, creating Aalto University as such was an entrepreneurial endeavour.

Aalto University was founded in 2010. It is named in honour of Alvar Aalto, a prominent Finnish architect. The main campus is located in Otaniemi, a district of Espoo, Finland's second largest city, neighbouring the country's capital Helsinki to the West. The University additionally functioned initially on two campuses for the economics and arts and architecture students in the Töölö and Arabia districts in Helsinki. In June 2011, however, the board at Aalto decided to centralise these

² See <u>https://www.aalto.fi/en/aalto-university/history</u> for details.

³ Information taken from https://en.wikipedia.org/wiki/Aalto_University.

⁴ Available in Finnish at http://www.aalto.fi/fi/about/organization/aalto-korkeakoulusaatio_saannot_10_2010.pdf.



emp**i**r**i**ca

functions to the main campus in Otaniemi.⁵ This was a gradual move which concluded in 2018.⁶ Finally, the university offers a BScBA degree in International Business in English in Mikkeli, Eastern Finland.⁷

In 2021, Aalto University had over 18,000 students across six Schools: Engineering, Business, Chemical Engineering, Science, Electrical Engineering as well as Arts, Design and Architecture.⁸⁹ The University considers science and engineering as its base. It seeks close collaboration between scientific, business and arts communities to foster multi-disciplinary education and research, which is the key to creating innovative products and services.

Fostering **entrepreneurship** is at the heart of Aalto's mission or, as the University puts it: "Entrepreneurship infuses everything at Aalto."¹⁰ Aalto's example in teaching, research and ethos is widely respected and well known in Europe and worldwide. The Massachusetts Institute of Technology (MIT) "rated Aalto's ecosystem among the top 5 rising stars in the world" in 2014.¹¹ Among the University's most prominent entrepreneurship institutions are the Aalto Start-Up Center, the Design Factory and the Aalto Ventures Programme. They not only promote an entrepreneurial culture at the University but they also contribute substantially to making the Greater Helsinki region a hotbed for business ventures. The Aalto Entrepreneurship communities in Europe. It introduced major concepts such as the "Startup Sauna" accelerator programme and the growth entrepreneurship event Slush. In early 2018 it introduced a Hackathon named DASH. Figure 1 shows the most important components of Aalto University's entrepreneurial ecosystem, which can be divided into teaching & researching, acceleration & services as well as community & events.¹²

Teaching & researching								
AALTO VENTURES PROGRAM	Aalto University Design Factory		startuplifers					
Educates students for	Education and research	Education for	Student internship					
high-growth	on product development	established	programme to work					
entrepreneurship		entrepreneurs	in startups in					
		_	Silicon Valley and					
			Asia					
http://avp.aalto.fi/	http://designfactory.		http://startuplife.fi					
	aalto.fi/		/					

Figure 1: Components of Aalto University's entrepreneurial ecosystem

 ⁵ See
 Bachelor's
 dissertation
 (in
 Finnish):

 https://aaltodoc.aalto.fi/bitstream/handle/123456789/23570/bachelor
 Perttula
 Tuomas
 2012.pdf?sequence=1&siAllowed=y

 6
 See
 news
 item (in
 Finnish):
 https://www.aalto.fi/fi/uutiset/aalto-yliopisto-sijoittaa-kaikki-ydintoimintonsa-paakampukselleen-otaniemeen

⁷ See (in Finnish): <u>https://www.aalto.fi/fi/koulutustarjonta/international-business-kandidaattiohjelma-mikkelin-kampus</u>

⁸ See Statistics Finland: Number of university students by university: <u>https://www.stat.fi/julkaisu/ckg66hse81qxg0109v9q3kcob</u>

⁹ See <u>https://www.aalto.fi/en/aalto-university</u>.

¹⁰ Quoted from <u>https://www.aalto.fi/en/entrepreneurship-and-startups</u>.

¹¹ See <u>https://www.aalto.fi/en/entrepreneurship-and-startups</u> and Aalto Annual Report 2016, p. 4.

¹² See <u>https://www.aalto.fi/en/entrepreneurship-and-startups</u>.

technopolis



Acceleration & services				
Startup Sauna	impact iglu	KIUAS		Aalto University Start-Up Center
Accelerator targeting top-notch tech teams	Accelerator for entrepreneurs to solve societal challenges	Incubator, accelerator and bootcamp run by Aaltoes	Community space for e.g. startups and accelerators	Provides business development services
http://startupsauna.co m/	http://impactiglu.org/	http://kiuas.us/	http://www.agrid. fi/	https://startupcenter aalto.fi/
Community & events				
Aaltoes	JUNCTION	5LU5H		DASH
Student-run entrepreneurship community	Hackathon – teams have 48 hours to create solutions to real-life challenges	Startup event that attracts over 15,000 participants and 2,000 startups	Event for and by students to inspire future entrepreneurs	"Hackathon for design-minded people!"
https://aaltoes.com/	https://hackjunction.co m/	http://www.slush.or g/	-	http://www.thedash. fi/

Source: https://www.aalto.fi/en/entrepreneurship-and-startups, own structure, DASH added to original source

1. Entrepreneurship as a major part of Aalto University's strategy

Aalto University considers itself as a strongly entrepreneurial organisation, held together by a common vision, values and mission. The current strategy at the university, 'Shaping a sustainable future' builds its activity for the future on three main pillars: sustainable solutions, radical creativity and entrepreneurial mindset, all three of which can be seen in everything the University does. Guided by its values, courage, collaboration and responsibility, Aalto means for these pillars to cause a lasting impact on the changing world.¹³ The Shaping sustainable future strategy follows and builds on a previous 2016-2020 strategy. Its key elements are summarised on a dedicated webpage, structured into mission, vision, values and strategic objectives. All this indicates entrepreneurial ambitions: The **mission** is "shaping the future: science and art together with technology and business". The related vision is "an innovative society" where "breakthrough discoveries deeply integrated with design and business thinking enable systemic solutions and accelerate innovation". The values for fulfilling this mission and vision are "passion for exploration, courage to influence and excel, freedom to be creative and critical, responsibility to accept, care and inspire as well as integrity, openness and equality". Aalto's strategy pursues five **objectives**:

- Research and innovation: Research excellence for academic and societal impact.
- Art and creative practices: Renewing society by art, creativity and design.
- Education: Educating game changers.
- Campus: Transforming the campus into a unique collaboration hub.

13

 $See: \underline{https://www.aalto.fi/en/our-strategy/aalto-university-strategy-we-shape-a-sustainable-future/linearity-strategy-we-shape-a-sus$

technopolis

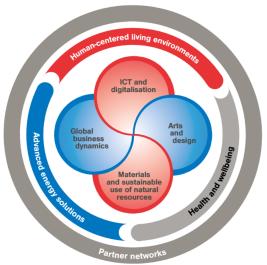
heinnovate

emplirica

• Enablers of academic mission: Excellence in advancing and supporting Aalto's core goals.¹⁴

The University seeks to manifest these objectives in four practical dimensions: Research and artistic excellence, multidisciplinary collaboration, a culture of entrepreneurship and tangible societal impact.¹⁵ Hence, entrepreneurship is an explicit and core part of the University's strategy. The 24-page strategy document includes the terms "entrepreneurial" and "entrepreneurship" 13 times, linked with teaching, culture, activities in general and the University as a whole. Beyond the website, the University communicates its strategy informally across the institution – which suits the University's general approach to build upon the intrinsic motivation of students, teachers and staff.

Figure 3: Aalto University's strengths and strategic foci



In **implementing** the strategy, Aalto builds upon its base in science and engineering with excellence in information and communication technologies and digitisation as well as materials and sustainable use of natural resources. This base is complemented by excellence in art and design knowledge and global business dynamics. Following on from this, Aalto focuses on three themes that address "major global and national challenges: advanced energy solutions, human-centred living environments, and health and wellbeing".16

The University stresses that the ultimate impact of activities in these fields depends on links with external partners and collaborators. Aalto has an excellent history of collaboration with the public sector, notably the City of Espoo, and private enterprises that sponsor activities such as Hackathons and business competitions Source: Aalto University Strategy 2016 – 2020, p. 9

A major example of implementing the strategy and deriving benefits from it are seven cross-University platforms – see section 4. Figure 3 (above) shows an overview of Aalto's strengths and strategic areas of focus.

The strategy also includes the **ecosystem** dimension of entrepreneurship: The aim is to "transform our campus into a unique collaboration hub".¹⁷ To this end, the University seeks to enlarge the central campus at Otaniemi in order to create a "vibrant centre" and to "structure the campus to support thematic, multidisciplinary clusters

¹⁴ See: <u>https://www.aalto.fi/en/aalto-university/strategy-2016-2020-shaping-the-future</u>

¹⁵ See: Aalto Shaping the Future 2016-2020; URL: <u>https://www.aalto.fi/sites/g/files/flghsv161/files/2018-04/aalto-yliopisto</u> strategy english.pdf

¹⁶ Aalto (2015), p. 8.

¹⁷ Aalto (2015), p. 17.

heinnovate

and open innovation".¹⁸ The University intends to establish shared spaces with integrated digital solutions for new ways of working. In experimental spaces, researchers will work together with experts and users to co-create solutions in particular for sustainable development.

Aalto University defined a broad set of **performance indicators** to measure the fulfilment of its strategy. On campus, these indicators include results of user and partner surveys, spaces shared with academic units in different fields, and external partners. "Enabling indicators" include energy efficiency and CO₂ emissions, results from employee satisfaction surveys, quality and cost efficiency of services as well as diversity of the funding base.¹⁹ The performance indicators measure the quality of publications, education and creative products, the value of businesses created as well as external partnerships and employment of graduates. There are also particular indicators for multi-disciplinarity: (1) participation in artistic, innovative and entrepreneurial activities, (2) the share of multidisciplinary studies in degrees taken, and (3) the share of multidisciplinary projects.

2. Commitment at a high level to implementing the entrepreneurial agenda

In order to be able to understand Aalto's leadership and governance approach to entrepreneurship, it is useful to know the University's administrative structure. Aalto's **organisation** is straightforward. It consists of the six schools – each having an Academic Committee and a Dean – and six governance bodies: the Professors' Council, the Academic Affairs Committee, the Vice Presidents and Service Directors, the Provost, the President and the Board. Figure 4 shows this organisation in an overview.

School of Arts, Design and Architecture	School of Business	School of Chemical Engineering	School of Electrical Engineering	School of Engineering	School of Science
Departments	Departments	Departments	Departments	Departments	Departments
Academic Committee	Academic Committee	Academic Committee	Academic Committee	Academic Committee	Academic Committee
Dean	Dean	Dean	Dean	Dean	Dean
<u> </u>		Academic Affa	s' Council airs Committee		
		Vice President Innovation, Education, Campu ation, Development, Communi	us Development, External Rel		
		Pro	vost		
		Pres	ident		

Figure 4: Overview about Aalto University's organisation

¹⁸ Aalto (2015), p. 17.

¹⁹ Aalto (2015), p. 20.

technopolis



Source: http://www.aalto.fi/en/about/organization/

The bodies have the following roles: The Aalto University **Board** is particularly relevant for leadership in entrepreneurial activities because it decides on the strategy, operation and financial issues and is responsible for any far-reaching plans.²⁰ The Academic Affairs Committee appoints the Board members. The seven members represent a broad spectrum of sciences and arts as well as outstanding social and industrial expertise on both national and international levels. All members have a close relationship to entrepreneurship and innovation. The current Chair is Mikko Kosonen who had leading positions in public organisations, charities and Nokia, and who is an honorary professor at Budapest Business School.²¹

- The Academic Affairs Committee, currently with 19 members and 38 deputy members chaired by the President, decides on the University's curriculum, degree requirements, criteria for student selection as well as other general rules about teaching, research and artistic activity.²²
- The **Professors' Council** acts as an advisory body for the President and Vice Presidents. Its members are the University's professors.²³
- The University has **Vice Presidents** for Research and Innovation, Education, Campus Development, External Relations as well as Art and Creative Practices. The Vice President for Research and Innovation, currently Janne Laine, and his office are most important for entrepreneurial activities. For example, they support coaching and mentoring activities as well public and private funding of entrepreneurial endeavours. Moreover, there are **Service Directors** for Finance, Digitalisation, Development, Communications, Human Resources as well as Advancement and Corporate Relations. There is no dedicated position for Entrepreneurship because Aalto considers entrepreneurship as embedded in all of its operations.
- Aalto's current President, since July 2017, is Mr Ilkka Niemelä. The Provost is Kristiina Mäkelä.²⁴

3. Encouraging and supporting schools and units to act entrepreneurially

At Aalto, the motivation to think and act entrepreneurially is taken for granted. When the Entrepreneurship Platform Manager started contacting schools and units about their entrepreneurial activities, he assumed that it could be "a hard sell", but it turned out that he ran through open doors. The schools and units are rather independent and can take responsibility for their development, which supports entrepreneurial mindsets.

²⁰ See http://www.aalto.fi/en/about/organization/board/.

²¹ See (in Finnish) <u>https://www.aalto.fi/fi/aalto-yliopisto/hallitus</u>

²² See <u>https://www.aalto.fi/en/aalto-handbook/academic-affairs-committee</u>

²³ See <u>https://www.aalto.fi/en/aalto-handbook/organisation</u>

²⁴ See http://www.aalto.fi/en/about/organization/management/.





4. Aalto University as a driving force for entrepreneurship in its environment

Aalto is a visible driving force for entrepreneurship in Helsinki, in Finland and beyond. In terms of output, 70 – 100 new businesses emerge every year from Aalto's ecosystem, and 50% of Finnish startups that originate from universities come from Aalto.²⁵ In terms of input, in the past four years more than 2,000 students studied in the Aalto Venture Programme.²⁶ These impacts are a targeted outcome, meeting Aalto's mission that has a national and even international dimension. Many of Aalto's entrepreneurial programmes, facilities and events are open to regional, national and even international audiences. This applies particularly to Slush and Startup Sauna. Slush takes place in the Helsinki Exhibition & Convention Centre, which is the largest building of its kind in Finland, operated by the Finnish Fair Corporation. Moreover, Aalto's AENT education programme for established entrepreneurs is directly oriented towards the outside ecosystem.

Source

This case study was prepared by Dr. Stefan Lilischkis from empirica Gesellschaft für Kommunikations- und Technologieforschung mbH, Bonn, Germany, through collection and analysis of broad documentation about Aalto University and an interview with a key representative from Aalto. The status of information in this case study is February 2018.

Contact

Aalto University (http://www.aalto.fi/en/)

Gregory O'Shea, Entrepreneurship Platform Manager, Department of Management Studies, Helsinki, Finland

Key links

Aalto University (2015): Shaping the Future. Aalto University Vision, Mission and Strategies 2016 – 2020. Available for download at <u>https://www.aalto.fi/en/aalto-university/strategy-2016-2020-shaping-the-future</u>, last accessed 19/2/2018.

²⁶ Figures in this paragraph taken from <u>https://www.aalto.fi/en/entrepreneurship-and-startups</u>.