



Shaping the future

Aalto University

Vision, Mission and Strategies

2016–2020



Foreword

When founded in 2010, Aalto University was given a national mission to strengthen the innovative capacity of Finland through first-class research, art and education. The Finnish Government and other founders made significant investments to launch Aalto University. After six years spearheading the renewal of the Finnish university system, we are now reviewing our progress and updating the strategy of Aalto University for the years 2016–2020.

The international recognition of Aalto University has risen quickly due to our unique profile and novel approaches to tackle the challenges posed by a rapidly evolving knowledge economy. Recruitments to our newly established tenure-track career system for professors have pushed forward the research and artistic performance and the internationalization of the community. We have restructured our Bachelor's curricula into a few broad programs, increased pedagogical education, and developed crossdisciplinary learning platforms, such as the Aalto Design Factory. Entrepreneurial education is now offered for all students. Our unique student- and alumni-driven entrepreneurial activities and a vibrant start-up ecosystem include the following internationally known brands: Aalto Entrepreneurship Society, Startup Sauna and Slush. We have increased the involvement of industry in our educational and research programs. We have invested in leadership development programs and redesigned and streamlined our internal services. Rebuilding our main campus in Otaniemi into a thriving innovation ecosystem involving our academic and industrial partners is under way.

Our vision carries a strong commitment to building a sustainable society driven by innovation and entrepreneurship.

We have already made significant progress on several fronts, and our efforts will continue toward our ambitious goals. We will focus on enabling new research spearheads who are at the international top of their fields. We will develop artistic activities to drive creative research, invigorate innovative economies and initiate, reinforce and challenge global thinking and practices. We will promote the emergence of a multicultural and diverse academic community because the success of universities relies to a great extent on their ability to attract the best faculty and students. We are building even stronger partnerships with industry and businesses for mutual benefit. We will partner with our students as co-creators of our educational curricula and entrepreneurial activities, and as the builders of our future. We will work hard to ensure the wellbeing of our people in the midst of the demanding change process of Aalto University.

Our vision carries a strong commitment to building a sustainable society driven by innovation and entrepreneurship. Our strategy entails building cutting-edge knowledge and technology that will enable us to offer solutions to the most pressing societal challenges. We will create innovative capacity through the convergence of first-class science, art, technology and business, which gains momentum from long-term partnerships with the best universities, industry and business.

I am convinced that, supported by a strong value-base of passion, courage, freedom, responsibility and integrity, our new strategy will inspire us in the next five years toward fulfilling our ambitious goals.



8 December 2015

Tuula Teeri, President



Operating environment

There are several significant trends that will influence the future of Aalto University. Research and higher education are key drivers of knowledge economies. The worldwide race for new knowledge and innovation is getting tougher. Universities face global competition for the best faculty and students. North American universities with generous endowment funds and a tuition-fee system for students continue to dominate higher education rankings. Asian nations are making huge investments and rapidly improving their performance as knowledge economies. European governments, struggling to keep up with the competition, are focusing funding on their best-performing universities and expecting efficient translation and dissemination of research outcomes. In Finland, economic challenges have led to decreasing public funding for higher education, research and the innovation sector as a whole. At the same time, rationalization and profiling of the Finnish university sector is strongly advocated.

Currently, the world is confronted with grave challenges concerning, for example, climate change, energy supply, health care and nutrition. In Finland, we also have the challenge of an aging population and economic dependence on successful exports. Solving such complex challenges will require convergent research by cross-disciplinary teams of experts and extensive stakeholder networks – which constitute Aalto University's unique competitive edge. Another asset of Aalto University is access to unique research data in national public databases, corporations and non-governmental organizations. Global and national challenges offer ample possibilities for disruptive innovation with significant potential for improving human life, protecting the environment and stimulating major growth in the economy. Finland's current national research priorities offer further opportunities with strategic investment plans in several areas aligned with Aalto's key competence and focus areas.

To address major societal changes, we need systemic solutions that build on user-centric approaches and new, value-generating business models. Successful universities in this era will not be those who replicate old practices but will be the ones who dare to explore and experiment in new, creative ways. Within Aalto, we have great opportunities to be at the forefront of future development by building a truly excellent, genuinely creative and multidisciplinary university that is well integrated in societal and economic development.

The way forward

Core elements of our 2016-2020 strategy



Shaping the future:

science and art together with technology and business

We are building a competitive edge by combining knowledge from different disciplines to identify and solve complex challenges, and to educate future visionaries and experts.



Photos, Left: AALTO UNIVERSITY ARCHIVE; Right: ADOLFO VERA; AALTO UNIVERSITY ARCHIVE



An innovative society

Breakthrough discoveries deeply integrated with design and business thinking enable systemic solutions and accelerate innovation.







Passion for exploration

Courage to influence and excel

Freedom to be creative and critical

Responsibility to accept, care and inspire

Integrity, openness and equality

Building on strengths

Aalto University's four competence areas and three integrative multidisciplinary themes that link them.

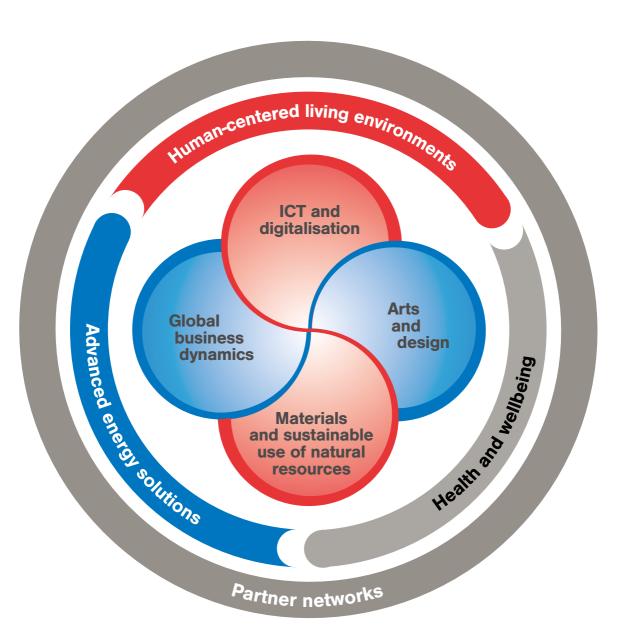
The foresight, understanding and expertise

of our people – academic freedom – constitute the cornerstones of our research and teaching. We will invest in long-term, high-quality research, which forms the basis of educational leadership and paves the way for paradigm-breaking innovations. We are striving to build a university that is more competitive, more focused but also more collaborative across disciplines.

Following an international peer assessment of our research quality in 2009, we held a community-wide discussion, and seven key areas were identified as the cornerstones of our research endeavors. Aalto University's research is based on a science and engineering core with recognized excellence in information and communications technologies and digitalization as well as materials and sustainable use of natural resources. Excellence in art and design knowledge building and global business dynamics complete our research profile.

We are strengthening our competitive edge by continuing to focus our recruitment and resources on our key areas of competence. Our academic core converges into three integrative multidisciplinary themes addressing major global and national challenges: advanced energy solutions, human-centered living environments, and health and wellbeing. Our positive impact on societal and industrial development relies on interactive networks with our partners and collaborators.

The three elements of our strategy are research and innovation, art and creative practices, and education. These core elements will be manifested in four dimensions: research and artistic excellence, multidisciplinary collaboration, a culture of entrepreneurship and tangible societal impact.





Research excellence for academic and societal impact

We are committed to developing cutting-edge competence in science, art, engineering, and business to identify and solve grand challenges toward a sustainable society. Multidisciplinary collaboration paves the way for unique solutions for the benefit of industry and society. We will invest in creating a research ecosystem that attracts the best in the world to work at Aalto University.

Development actions

1 Advance uncompromising research excellence and multidisciplinary endeavors toward breakthrough discoveries and disruptive innovation.

2 Enhance strategic focus areas by establishing strong research environments with state-of-the-art infrastructure and opportunities for collaboration.

- 3 Strengthen research networks with high-impact international partnerships at leading research institutes and initiatives.
 - 4 Cultivate a knowledge-driven innovation ecosystem by strengthening private and public sector partnerships, improving the recognition of the value of research findings with significant commercial potential, and fostering entrepreneurship.



Renewing society by art, creativity and design

Art, design and creativity drive innovation and entrepreneurship. These concepts radically question and challenge our society and culture. They generate new knowledge and understanding and create value by leveraging humane designs and viable solutions. To reap such rewards, we will develop and promote art-based activities across the boundaries of diverse disciplines, knowledge frameworks and communities.



- 1 Build excellence to position Aalto University as a global leader in high-quality artistic activities.
 - 2 Increase the visibility, impact and value of creative practices in society.
 - 3 Develop a broader, art-based offering for all students to expand their perspectives and skillsets.
 - 4 Build mechanisms to integrate creative practices and design thinking with technology and business throughout Aalto University and its partner networks.



Educating game changers

Grand challenges call for the education of professionals with the knowledge and capabilities to build a sustainable society and to increase wellbeing through disruptive change. These capabilities need to be rooted in disciplinary excellence augmented by art, creativity, multidisciplinary collaboration and entrepreneurship. The development of programs toward integrative thinking and practices to engage students in societal challenges will improve the relevance of our education. We will increase the international exchange opportunities for our students.

Development actions

- 1 Attract and engage the best students through inspiring curricula that address societal challenges and offer multidisciplinary opportunities and consistently high quality learning experiences.
 - 2 Develop and deploy forerunner digital learning solutions to improve learning outcomes.
 - 3 Ensure success of our students' capabilities and wellbeing in a multicultural and diverse community by providing first-class study support.
 - 4 Strengthen the working life capabilities of students by leveraging deep industry-academia relationships in educational projects, courses and internships.



Transforming our campus into a unique collaboration hub

Our open and experimental collaboration ecosystem will attract students, faculty, staff and partners worldwide. The campus, with its state-of-the-art research and learning environment, is recognized for optimally supporting the production of new knowledge and innovation. We will build a vibrant campus center that offers attractive opportunities for partnering, collaboration and sharing ideas and experiences.

Development actions

- 1 Structure the campus to support thematic, multidisciplinary clusters and open innovation.
 - 2 Promote new ways of working, shared spaces for a diverse spectrum of users, mobility, flexibility, co-creation and wellbeing.
 - 3 Create high-quality attractive spaces with integrated digital solutions to offer inspiring and productive user experiences.
 - 4 Develop experimental spaces together with experts and users to build an exemplary university campus supporting sustainable development.



Excellence in advancing and supporting our core goals

Enabling the core academic mission of the Aalto community is our first priority. To compete globally for the best faculty, students, staff, partners and other stakeholders, we need to develop world-class conditions and an environment for research, art, education and collaboration. We will invest in sustainable, long-term resourcing of our strategic priorities, build practices to recognize achievement and develop streamlined support service solutions facilitating academic excellence.

Development actions

- 1 Attract and retain talent by providing state-of-the art career opportunities and by recognizing and rewarding excellence.
 - 2 Enable achievement through stimulating, forward-looking leadership at all levels of the university and professional practices throughout the organization.
 - 3 Create value for our core activities by providing first-class support service solutions through co-design, digitalization and partnering.
 - 4 Invest in proactive communication and digital presence to support continued development of our reputation as an excellent and entrepreneurial university.
 - 5 Secure financial sustainability by diversifying our funding base, promoting public funding that rewards excellence and impact, making focused investments, and practicing lean management.

Key performance indicators

for the 2016-2020 strategy

Excellence

Multidisciplinarity

Entrepreneurship

Campus

- 1 User and partner survey results
- 2 Spaces shared with academic units in different fields and external partners
- 3 Energy efficiency and CO² emissions

$\overline{Societal\,im}pact$

Strategy enablers

- 1 Employee satisfaction survey results
- 2 Quality and cost efficiency of services
- 3 Diversity of funding base

Art and Research **Education** creative practices Quality of publications Quality of productions Quality of education (proportion of top-10% (proportion of top-10% peer (graduate feedback) publications) reviewed forum appearances) I. Participation in artistic, innovative and entrepreneurial activities II. Share of multidisciplinary studies in degrees taken III. Share of multidisciplinary projects Value of business created Significant corporate, public and Employment non-governmental partnerships (% of recent graduates)



Science and Art together with









Aalto University P.O.Box 11000 FI-00076 Aalto

aaltouniversity





aalto.fi