Nurturing Startups, Venturing, and the Finnish Entrepreneurial Ecosystem

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1. Summary of the societal impact

Over the last 20 years, the researchers and faculty of the Department of Industrial Engineering and Management (DIEM) have had a key role in energizing, motivating and facilitating the establishment and growth of 1) student and DIEM alumni led entrepreneurship and venturing activities; 2) fostering entrepreneurship and venturing communities and educational settings at Aalto University, including the Aalto Entrepreneurship Society (AaltoES), Aalto Venture Program (AVP), and Startup Sauna; and 3) supporting the Finnish entrepreneurial ecosystem, including SLUSH, and high-growth entrepreneurship policy, and venture capital funding activities.

2. Underpinning research activity related to Aalto activities

Since the 1990s, several professors in DIEM have conducted groundbreaking research on entrepreneurship and venturing. Technology-based entrepreneurship has been an important area in the department from its early days. Early contributors include Prof. Erkko Autio, who obtained a doctoral degree at DIEM and was a professor in the department until 2007. He is currently a Chaired Professor at Imperial College London, UK, and one of the most cited scholars on entrepreneurship and entrepreneurial ecosystems. While he has worked with, supervised and co-authored with numerous DIEM doctoral students and faculty, Prof. Autio’s contribution to the high-growth entrepreneurship policy in Finland is influential. Since then, DIEM has focused on entrepreneurship and venturing research. During the late 1990s, DIEM’s research activity on technology-based entrepreneurship and corporate venturing was strengthened, resulting in a great number of doctoral dissertations, best paper awards, top tier publications and placement of DIEM graduates as entrepreneurship professors in many leading universities around the world. Of the current DIEM faculty, Prof. Markku Maula is a leading researcher in areas of venture capital and private equity, and external corporate venturing. Assistant Prof. Mikko Jääskeläinen focuses on venture capital, accelerating growth and creating value. Assistant Prof. Marina Biniari, recruited from the University of Strathclyde in the UK, conducts research on corporate entrepreneurship. Professor of Practice Peter Kelly has been teaching courses since 1998 on venture capital and new venture development, inspiring a large number of students each year to explore entrepreneurial career opportunities. In addition, many other professors in the group, including Robin Gustafsson, Jens Schmidt and Timo Vuori, conduct research at the intersection of strategy and entrepreneurship. DIEM has also recently recruited postdoctoral researchers from leading European universities, including Rotterdam School of Management (Netherlands) and HEC Paris (France) and is about to complete the recruitment of a new Professor of Entrepreneurial Leadership.

Responding to the increasing student demand for more broadly available entrepreneurship education at Aalto University, Prof. Maula and the faculty and alumni of DIEM founded the Aalto Venture Program (AVP) in 2011 in collaboration with Aalto Entrepreneurship Society (AaltoES), Aalto University leadership, and Stanford Technology Ventures Program (Prof. Maula acted as the Founding Director of AVP from 2011 to 2012). Assistant Professors Jääskeläinen and Biniari have led curriculum development in AVP since 2013. Dr. Olli Vuola, 1

1 DIEM alumni now working as entrepreneurship-related professors around the world include: Erkko Autio (Imperial College London, UK), Helena Yli-Renko (University of Southern California, USA), Riitta Katila (Stanford University, USA), Pia Arenius (Royal Melbourne Institute of Technology, Australia), Annaleena Parhankangas (South Dakota State University, USA), Thomas Keil (University of Zurich, Switzerland), Yu Liu (Rotterdam School of Management, Erasmus University, Netherlands). Several have also stayed in Finland.
Executive Director of AVP (and previously a Docent at DIEM) has led its development, contributing to the worldwide reputation and recognition of Aalto and the Finnish startup ecosystem. Professor of Practice Kelly acted as mentor, funder and facilitator for the initial activities by students leading to the founding of AaltoES in 2008. Moreover, DIEM alumni play a key role in boosting student-led entrepreneurship initiatives.

3. References to research / artistic activities

DIEM faculty has published actively in top-tier journals (e.g., FT50 journals) on topics related to high-growth entrepreneurship, corporate venturing, and venturing. Below are three examples representing different topics:


4. Societal Impact, activities and roadmap for the case

DIEM alumni have founded over 50 startups. Successful startups by alumni include Relex, CRF Health, Wicom, F-Secure, Hintsa Performance, Sievo, Vilant, Nordic Healthcare Group, Accountor, Fifth Corner Inc., Symbioosi Partners, and Supercell. Numerous smaller and less successful startups have also been established during 2013-2017 by DIEM students and alumni.

AaltoES was founded in 2009 to inspire students to become entrepreneurs, to think big and to think globally. AaltoES maintains a 1 500 square meter coworking space on Aalto University’s campus in Otaniemi called the Startup Sauna and organises over 100 events per year. AaltoES has become the world’s largest student-run entrepreneurship society.

DIEM has an active role in entrepreneurship education through AVP, the Aalto University-wide minor program, which since its establishment in 2011 has taught 2 100 students and had over 15 000 participants representing 75 nationalities at its events. This activity has contributed to the development of entrepreneurship and venturing educational settings at Aalto University. From 2013 to 2017, tens of DIEM students have held leading positions at AVP, AaltoES and SLUSH.

SLUSH has grown since its start in 2008 to become the leading annual venturing event in Europe. In 2017, it brought over 20 000 attendees and 2 300 startups together. DIEM’s alumni and student communities have had a vital role in founding SLUSH, which is managed by Startup-säätiö Foundation led by DIEM alumni and doctoral students. The last three CEOs have been DIEM students. The department has supported its students and alumni by mentoring and training those that act and have executive roles in SLUSH.

Numerous venture capital funds were established by DIEM alumni and students from 2013 to 2017. For example, our alumni community has established a venture capital (VC) firm, Prodeko Ventures, to invest in our students’ startup firms. Also, the following VC funds have been founded and/or are led by DIEM alumni: Icebreaker (Riku Seppälä), Lifeline Ventures (Timo Ahopelto), Capman (Ari Tolppanen), Loudspring (Timo Linnainmaa and Tarja Teppo), Inventure (Sami Lampinen) and Privanet (Asko Schrey). Moreover, Wave Ventures is Europe’s largest student-run VC fund, which was launched 2017 in Helsinki by DIEM students.

5. Sources to support the impact case

Although a big part of the impact on startups, venturing and the Finnish entrepreneurial ecosystem comes from our Aalto University-wide entrepreneurial education and other activities encouraging our students in entrepreneurial careers, DIEM faculty has played a central role in caring for the activities contributing to the development of the Finnish entrepreneurial ecosystem. DIEM’s activity has resulted in numerous written records. For instance, when the Finnish (and the European) VC market and the entrepreneurial ecosystem was completely underdeveloped after the burst of the internet bubble in the early 2000s, Prof. Maula actively consulted the Ministry of Employment and the Economy and...
other Finnish, Nordic and European policy makers on the development of a stronger and more vibrant market for early-stage risk capital. Many of the policy recommendations made in 2003-2009 have thereafter been largely implemented in subsequent policy initiatives and programs, such as Vigo, Young Innovative Company funding through Business Finland (NIY), Tekes VC, and the activation of business angel investments:


The creation of scientific knowledge of the determinants of venture success has continued during the evaluation period, from 2013 to 2017.


Also, DIEM faculty and staff have obtained 19 official patents and invention disclosures. This is an exceptional achievement given the field of research to maintain and renew the knowledge base and to inspire and educate entrepreneurial engineers to build new ventures. High-quality combinations of theory-driven and problem-oriented research of DIEM build the basis for entrepreneurs to meet the global challenges of creating and transforming technology-based business. Also, DIEM invests heavily in the pedagogical approach that facilitates entrepreneurially-minded students’ learning of the essentials of entrepreneurship in practice. With some new faculty recruitment in this area, DIEM is in a good position to continue as an important contributor to the development of Aalto University’s entrepreneurial ecosystem.

6. Future goals

DIEM has made important impacts on startups, venturing and the Finnish entrepreneurial ecosystem by energizing and motivating entrepreneurs and facilitating the growth of student-led entrepreneurship activities within and around Aalto University. Our activities have in many ways invigorated the Finnish entrepreneurial ecosystem, which is today recognized worldwide. Going forward, when Finland is competing with other entrepreneurial ecosystems around the world, continued efforts are needed