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# VENTURE CUP - THE NORDIC BUSINESS PLAN COMPETITION

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**Abstract:** Venture Cup is a business plan competition that started in 1998 in close collaboration with Universities and Business Schools in Northern Europe. The competition is a non-profit event run by regional Nordic Venture Cup organizations in Sweden, Finland, Norway and Denmark and together this business start-up concept is considered to be the largest business plan competition in the world. Each year more than 800 participants in Sweden enter the 3-stage process of the competition where they formulate their business idea, market plan and finally a complete business plan. The course runs each year from November through to May during which participants engage in lectures, workshops, rocket pitching, writing business plans, coaching and mentoring at the University. Venture Cup has grown into the premiere Nordic entity whose main interest is helping entrepreneurs with aspiring business ideas to create a start-up company in a structured framework of educational activities, coaching, mentoring and voluntary society and business community support activities. The purpose of the competition is to promote entrepreneurship within Scandinavian universities and the society as a whole as well as to generate high-growth start-up companies. More than \$400K is given away as prizes across the Nordic competition events every year. The societal impact of Venture Cup over the years has been significant, and from its start it has significantly contributed to job creation, especially in the high tech area. This paper aims to describe the general set-up and the success factors of Venture Cup, as an example of a well-established Business Plan Competition. The focus is on Sweden, which has been

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the most successful region. Factors described are stakeholder value, academic cooperation, type of management and operative incentives, responsiveness to change, types of participants, openness and how the growth process has occurred of the competition itself. We also detail some of the offerings provided such as networking, entrepreneurial orientation and attitude shift of the participants, as well as their tacit and narrative business training. In the Nordic setting, Venture Cup has emerged as a concept upon which start-up companies are built. The competition is a test arena for novel entrepreneurial ideas, and it has demonstrated its potential as a value-creating network for innovators, entrepreneurs, academia, as well as the regional government and business community.

**Keywords:** *Business Plan Competitions, Entrepreneurship, Innovation, Regional Development, and Empowerment.*

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## INTRODUCTION

Business Plan Competitions (BPCs) represent a new concept to stimulate new venture creation and growth, which originated in the US some 25 years ago. The BPC concept has spread to all continents and is today adopted as a key element in the entrepreneurial University concept model where academic centers are active contributors in the commercialization of university research and technology know-how.

Available BPCs vary in terms of history and background, expressed rationality, implementation in terms of scope, reach, setting, academic links, as well as societal focus. Although most BPCs are supported and embedded in the University ecosystem, some restrict participation to University graduates, while others

have adopted an open policy and include a range of contestants. Another important characteristic is whether or not the contests focusing on new venture creation are open to outside educational expertise and competence to create a valid and critical mass of business competence. Such a vision will strengthen the position of the University as an actor in the venture creation ecosystem, and allow academia to see beyond its traditional walls to stimulate regional entrepreneurship education and activity in a wider sense.

Finding entrepreneurial champions within the university community and combining them with additional talent such as donors and sponsors from the business community and government agencies may implement vibrant BPCs implemented in the academic ecosystem. In many cases, such as

in MIT (Massachusetts Institute of Technology), Moot Corp and Venture Cup competitions students and alumni have been instrumental in creating the BPC concept (Maack et al 2011).

After the initiation of the local or regional BPC concept, internal and external actors need to work in concert to encourage expansion, and to actively suppress bureaucratic resistance to further developing the BPC concept and other entrepreneurial academic venture creation activities. Experience demonstrates, that when the implementation of an academic BPC is successful, it often develops into a robust curricular expansion and co-curricular programs for the development of innovation and entrepreneurship teaching and research incentives (Hedner et al 2010, Hedner 2011).

The Venture Cup BPC has been run for a decade and today involves a range of Nordic universities and colleges. From its start, the role and importance of the Venture Cup BPC increased, and it is now the major North European BPC concept. The present paper provides an overview of how the Venture Cup concept emerged and developed, the number and range of

participants over the years and their views on the importance of participating in the Venture Cup. Further, we assess the overall impact of the competition on the flow of business ideas, company start-ups to growth companies in the regional academic clusters, and discuss the general role of a BPC, such as Venture Cup, in the regional innovation and entrepreneurship clusters in the setting of the Nordic countries.

Finally, the effectiveness and appropriateness of entrepreneurship educational concepts are critically assessed. Should they be formal management educations or are there alternative concepts such as BP competition concepts that are more effective in terms of providing societal return of educational investments?

## **THEORETICAL BACKGROUND**

### **Stimulating entrepreneurial behavior by education and training**

As the interest in entrepreneurship and new business development grows worldwide, the number of academic courses and training curricula to stimulate the entrepreneurial orientation of individuals expands (Klofsten

2008). Activities that stimulate and facilitate training of academic entrepreneurs are increasingly implemented to create an entrepreneurial culture throughout University in research, in curricula and in interactive activities with society and business communities (Garavan & O'Conneide 1994; Klofsten 2008).

Teaching of specific entrepreneurial courses and specific training programs for individuals who intend to start a business are also being increasingly implemented. The creation of an entrepreneurial university culture, has promoted business plan competitions in the common Triple Helix community (Etzkowitz et al 2000). For the individual entrepreneur, courses in entrepreneurship and real venture creation positively influence attitude towards starting businesses. Narrative case studies and seminars given by entrepreneurs who have participated in start-up companies are also essential parts of the academic educational program (Delmar 2003).

Previous research has shown that the further entrepreneurs progressed in their development, and the more successful it was the more positive their attitude towards training in entrepreneurship and

general management became (Davidsson 1989; Klofsten & Mikaelsson 1996).

Klofsten (2008) reviewed a number of success factors identified for entrepreneurship training based on regular evaluations of an academic entrepreneurship program. Success factors which continually improve structure and process were; definition of actual needs; establishment of a holistic educational and training approach; link the program to a network of resources and firms; ensure adequate supply of competence suited to the educational situation; train the participants' self-confidence as business leaders; emphasize commitment to the business task; benchmark for distinct and measurable results; use a tried and proven set of tools; plan coaching and mentoring; establish a blend of theoretical and practical teaching methods; focus the programs on target groups of presumptive entrepreneurs; build credibility in the academic regional and business societies; and find a balance between formal and informal educational and business development settings.

Business plan competitions vs. management education as a driver of venture creation

A number of studies have found a resistance to entrepreneurial education at universities. Universities, by tradition, lack sufficient theoretical and practical expertise to design and implement effective venture creation programs (Curran & Stanworth, 1989; Klofsten & Mikaelsson, 1998). There is, evidently, much more to do if entrepreneurship is to become a core component of the university curriculum. Integration of entrepreneurship training firmly into the academic structure has the purpose of creating an entrepreneurial university setting (Etzkowitz & Klofsten, 2005; Klofsten & Spaeth, 2004). The BPC training concept meets some of these educational challenges by combining theoretical business education with tacit and narrative business training. Students develop investment ready business plans in competitive real world setting during a structured and formal guiding, coaching and mentoring in the presence of experienced entrepreneurs and business professionals.

In terms of societal return of educational investment in innovation and entrepreneurship programs, the number of new firms or the number of new jobs created is a valid measure

of success. Investment in entrepreneurship educational programs and business plan competitions; show that the increase in employment through new business development can be expressed as an exponential function (Wallmark&Sjösten, 1994; Roberts & Eesley, 2009; Hedner et al., 2011).

Research indicates that entrepreneurship is often behaviorally conditioned. It is also closely associated with a number of factors such as the ability to act, level of commitment, and driving forces of the individual who develop and commercializes their idea. Studies on entrepreneurship training show that ambitious and well-motivated individuals who are willing to take risks often face barriers that inhibit them from reaching their goals. These barriers may be overcome by adequate educational programs and training in entrepreneurship. A broad range of universities around the globe have developed some form of training program in entrepreneurship, related to the BPC concept, in order to stimulate growth and develop new entrepreneurial ventures in the academic setting. These programs also offer alternative career paths to students, researchers and teachers.

The ongoing institutionalization of many entrepreneurship programs and venture creation activities at the university level has generated new implications both for research and practice. Entrepreneurship is increasingly becoming a trans disciplinary subject extending to many disciplines: micro- and macro- economics, innovation management, project management, the natural sciences, and psychology and sociology. In particular, it is important to create a scientific platform to better understand the nature of new business development and especially the early business development processes can be effectively organized and managed (Klofsten & Spaeth, 2004). The individual or individuals who create a new business are often inexperienced, have no employees, lack sufficient funds and often have weak or undeveloped networks. The business ideas that such individuals are involved in are usually vague, but the driving forces are strong. Therefore, one of the most important aspects of all entrepreneurship training is to bring down the existing barriers by encouraging individuals to become more entrepreneurial, increase their self-confidence, and at the same time equip them with professional tools to help them

realize these goals. These aspects should all be addressed in academic BPC programs where prospective entrepreneurs learn how to structure their business development work, access a network of experienced entrepreneurs, and also receive professional guidance and feedback on their business ideas. Once these activities have been completed, BPC program managers often witness how individual participants are able to grow as entrepreneurs during the course of a program.

## METHODS

The target population for this study was all teams that participate in one of the Venture Cup regional competitions in Sweden. An overview assessment was made on the entries up to May 2011. A detailed survey was based on data from the 2003 and 2008 assessments made by Klofsten and Wiklund (2005) as well as Klofsten and Norrman (2010). The first part of the study includes a 10-year analysis and the latter part analyses the entries from the first 5 years of the VC competition.

In the initial part of the study, we assessed all entries from 1998 until 2011, i.e. 14 years of BPC

entries. The latter part of our investigation is based on second hand data from 2003 and 2008 (Klofsten & Wiklund 2005; Klofsten & Norrman 2010). In that latter 2003 survey there were a total 2561 contest entries available for assessment. From a web-based questionnaire, 681 responses were analyzed, representing 27% of available entries in 2003 (Tables 1 - 4). The web-based questionnaire was short and specific, consisted of multiple choice questions as well as short and open questions. Basically, the questionnaire consisted of four parts; 1) participants' background data; 2) status of their contribution, and if relevant, reasons for closure; 3) status and development of companies started; and 4) personal reflections and assessment of the significance of the Venture Cup BPC.

## **RESULTS**

### **Evolution of the venture cup competition and concept overview**

Since its start in Gothenburg in Western Sweden, a total of over 10000 unique business idea competition entries have been submitted to the Venture Cup BPC in Sweden, with an additional large

number of BPC entries and investment ready start-up companies have been created in Norway, Denmark and Finland.

The competition was established in 1998 by an initiative from McKinsey & Company that contacted the University of Gothenburg and Chalmers University of Technology with the idea of a Business Plan competition that mimicked the MIT \$100K Entrepreneurship Competition. The setup was that the universities should support students to run the competition and establish a core of coaches, mentors and teachers from the academia as well as the industrial and societal network that existed. The Venture Cup established itself in the growing innovation system in Gothenburg in close collaboration with the entrepreneurship schools at the universities. From this collaboration the idea of a academic course that followed the competition structure but at the same time gave higher education credits or the participants evolved and soon became a very popular course for the students at the university. Since Venture Cup has always have had a low barrier for entry to the competition, this course was not mandatory for the competitors, but

provided a good possibility for students to obtain academic merits at the same time as they gain experience from building their business ideas into ventures.

The basis of business plan competition was from MIT but was adapted to Swedish conditions. With Venture Cups early focus on attracting business entries from academia, there was an ambition to influence the general perception of innovation and entrepreneurship within the university setting. During its early life, Venture Cup developed an emphasis to stimulate and implement an entrepreneurial ecosystem by bringing together academia, industry and regional government to create an established network of innovators, entrepreneurs, partners, organizers, jurors and supervisors. The Venture Cup BPC in Sweden is today run as four independent non-profit organizations: Venture Cup West, Venture Cup East, Venture Cup North, and Venture Cup South. The Norwegian Venture Cup is divided in five regions and Finland and Denmark has one national competition each.

Business plan competitions run in three stages starting each year in September and ending in

May (Table 5). The participants develop their business idea, write an initial marketing plan and ultimately they develop a complete and detailed business plan during the first three stages of the competition (Table 5). There is also a fourth element, namely the Sweden Final where the first, second and third from stage 3 in each region compete. Entries are evaluated at each stage by a special jury composed of representatives from various business sectors and academic disciplines. Each stage ends with an inspiring awards ceremony for the best business ideas and business plans. The total prize money in the Venture Cup contests each year totals more than \$400K.

During the course and contest, the Venture Cup participants are given the opportunity to follow customized training programs with interesting speakers and entrepreneurial role models. The course literature "Business Planning - A Guide for New Growth" (Venture Cup 2010) is the basis of the course and training program and provides a practice-oriented guide on how to formulate a business idea and write a business plan. Professional jurors and supervisors also provide participants constructive feedback

and guidance during the different parts of the contest. All activities aim to help participants to move from concept to investment ready business plans for their Venture Cup entries. The academic program is offered at no cost, and all services offered are free of charge to the participants thanks to voluntary work of the teachers, supporters, sponsors and financial partners of Venture Cup.

### **Participants, Outcomes and Start-up Case Examples**

#### **Participants perception of Venture Cup**

An important part of the Venture Cup is whether the participants perceive that Venture Cup helped to develop their entries and whether they progressed in their start-up business competence. In the questionnaire (Klofsten & Wiklund 2005), seventeen claims were made about how participation in Venture Cup affected the respondents ranging from “Is very bad” to “very beneficial” which were coded on a Likert scale of 1 to 5. Examples of statements were: “Participation in the Venture Cup has made my entry significantly better”; “Participation in the Venture Cup has motivated me to run a

business”, and “Participation in the Venture Cup has strengthened my confidence.” An analysis of responses indicated that individual respondents to all seventeen claims made indicated that, on average, the respondents are fairly neutral to the actual benefit of the training course (data not shown). The variation between participants was substantial, and there were some very positive about the competition but there were also some very negative.

#### **Outcomes - From business ideas to growth companies**

In the 2003 survey, 77% of the Venture Cup contestants were men and 23% women. Half of the contestants were under-graduate or graduate students. No less than 59% of respondents had at the time of the survey an academic degree and another 15% had a licentiate or a doctorate degree. A significant proportion of the participants were students at the time of the competition. About 15% students participated in Venture Cup as a part of their compulsory academic curriculum. The second largest group was the employed or self-employed, which together represented 28% of the VC contestants up to 2003. The average age of the participants was 34 years at

the time of the competition. This is in line with the average age given by the Swedish National Bureau of Statistics (SCB) annual reports for Swedish start-ups where roughly three quarters of new entrepreneurs are over 30 years of age. Thus, it is clear that Venture Cup competition contest attract mainly academics (about 60%) but also a significant number of employed or self-employed (about 30%).

The distribution of Venture Cup competition entries in respect to business sector (Klofsten and Wiklund 2005) is shown in Table 2. Overall 29% of the contributions are in the IT, software and electronics hard ware high tech-related activities. Compared with start-ups in general in Sweden, the Venture Cup BPC provides a clear over-representation in knowledge-intensive business concepts. Looking at the division between goods and services shows that only 27% of the contributions are purely in services while 45% were pure products, and 28% represented a combination of software and services. Interestingly, 36% of the respondents also felt that their contribution was research based.

Of interest is that most of the entries in the Venture Cup

competition are at an early stage of development (Table 3). Some 18% had their product tested on customers or ready developed, and 12% of the competition entries had their product/service available on the market.

In terms of types of external financing only 9% of companies had access to venture capitalist/business angel or bank financing. Table 4 shows that two thirds of all Venture Cup contributions had no access to financing and that 15% had received some type of external grant.

During follow up, it also became clear that many of the entries had closed or were dormant. Factor analysis (Klofsten & Wiklund 2005) revealed that the primary reason for not developing the business idea was simply that the originators believed their business idea was not strong or unique enough.

A total of 220 companies were registered out of the 681 Venture Cup participants who answered the web-based questionnaire in 2003 (total of 2561 contest entries available for assessment). This represents about 32% of all contributions that answered the questionnaire. If these

respondents were representative of Venture Cup entries, it would mean that more than 800 companies in total would have been registered following participation in the contest. Of the registered companies, as many as 48% were active on the international markets while 39% addressed national and 13% local/regional markets. An overall extrapolation of the societal impact of the Venture Cup contest up to 2005 indicates that more than 2300 jobs were created with a total turnover in the range of 3 billion SEK (corresponding to approximately 500 million U\$ or 300 million e).

#### **Case reports of growth companies emerging from VC**

The newspapers NyTeknik("New Technology") and Affärsvärlden("Business World") compile an annual list of Sweden's hottest young technology companies. Of the 250 nominated companies, several of them have their roots in the Venture Cup BPC.

In table 7, some illustrative and representative case examples are given of fast growing or high potential start-up companies originating from the Venture Cup BPC. A short description of each case follows below:

**Applied Nano Surfaces (ANS).** ANS has quickly gained a number of renowned customers such as Volvo, Scania and Atlas Copco. They are attracted by the surface coating technology, which saves energy by reducing friction in mechanical systems. Now the company starts the actual production. Just before Christmas the ownership was strengthened with Fouriertransform.

**Nanologica.** Glass facades constructed of transparent solar cells can become a big market for Nanologica in a world that want renewable energy. The technology has been developed in partnership with Swedish Fasadglas, which has invested 18 million. The EU has given almost as much in contributions. At the same time, Nanologica sees completely new opportunities for their nano- and micro-porous materials, such as in biotechnology and cosmetics.

**Bambuser.** Bambuser has in the past year had breakthrough in two ways. In North Africa and the Middle East the service was widely used to disseminate information in real time during the unrest. In Sweden, the company has written agreement with media companies such as SVT, TV4, NRK and YLE. Improved cellular

and proliferation of advanced mobile phones helps Bambuser.

**Hövding.** A discreet collar that transforms into a protective helmet during an accident. The Malmö based company Hövding have developed an airbag for bikers. Now retailers across all of Europe fight for contracts.

**Mindmancer.** Mindmancers automatic camera surveillance protects more than 80 schools against fire and vandalism. The company has a technology that does not violate privacy or provide costly false alarms. The secret lies in smart algorithms. Over a hundred construction sites and industries have adopted the technology.

**Minesto.** Minesto has developed a new way for energy production from the tidal energy innovation "Deep Green". Deep Green Underwater Kite ranked as one of the 50 best inventions of 2010 by Time Magazine.

## DISCUSSION

Venture Cup is currently represented on all positions in Swedish universities and is a major aid organization for promotion of new growth companies, especially from the academic world. The

Venture Cup business plan competition stands together with incubators, technology parks, Technology Transfer, holding companies of universities, and other actors. However, Venture Cup is more than just a competition. The large group of participants has the opportunity to follow a customized training program with interesting speakers, coaches, mentors and role models. Professional jurors and supervisors also provide participants with constructive feedback and guidance during the competition. All activities in consort aim to help participants to move from an initial business idea to a potential growth company in a setting of free and professional coaching. Support is also provided from the Venture Cup financial partners and non-profit network.

From a capacity building perspective, few other incentive concepts in society aiming to create qualified jobs and growth in the industry sector could rival the Venture Cup Business Plan Competition concept in Northern Europe. Notably, the Venture Cup Business Plan competition started out as an academic innovation and entrepreneurship incentive, which received private as well public regional

support. An important conclusion to draw from the experiences so far is that, the Venture Cup Business Plan Competition concept is a knowledge-intensive business-creating event. It also reflects the participants' educational background. So far it has resulted in more product-related business start-ups rather than service-based ones. Venture Cup initiates and reflects the type of entrepreneurship that Swedish politicians and decision makers want to encourage (see the Research Bill, 2004/05).

For participants, one of the main benefits from taking part in the Venture Cup BPC was that one could get a professional evaluation of their business as well as a opportunity to get suggestions for improvement. A number of respondents indicate that the competition's business acumen is important and that participants are considered as 'entrepreneurs' and not 'students'. This was perceived as inspiring, enjoyable and encouraging, which in turn provided more confidence to rate their business initiative.

An important aspect of Venture Cup is that it functions as an important event in the regional academic venture creation

ecosystem. A BPC such as Venture Cup focuses on the importance of major universities to demonstrate superior return of investment based on pragmatic educational efforts. Students as well as the business society at large greatly appreciate this. Participation in Venture Cup does not always lead to business start-ups. Among University graduates, running one's own business is not the first career choice. Most academics prefer employment in a private firm or in a public organization. This means that for many students, running an entrepreneurial venture is not an attractive alternative even if the business idea itself is interesting. For well-qualified people in Sweden and the Nordic area, there are good employment opportunities. Therefore, the opportunity cost of entrepreneurship is high in Sweden (see Delmar, Sjöberg & Wiklund, 2003 for a comprehensive analysis). We consider that it is for the reasons noted above rather than the poor quality of business ideas that contributions to the Venture Cup do not more frequently develop into established companies. Importantly, policy makers should work for better conditions for business creation that reduce the opportunity costs of entrepreneurship. Government and the

policy makers are better placed to address this than the Venture Cup actors themselves.

Venture Cup has an important role in the innovation system, primarily by being a test-bed for innovative company start-up and by serving as a platform for entrepreneurial experimentation in the academic ecosystem. A venture creation platform, where contestants and actors are allowed to test and fail, is a key feature of the innovation system that is often neglected. Having the opportunity to test and verify their ideas in an unpretentious environment is important and it is out of these entrepreneurial experiments that new and growing businesses often emerge. This is a role of a BPC such as Venture Cup. Sadly, it is not fully appreciated.

For the university venture cluster ecosystem, Venture Cup is simply an important source of inspiration that illuminates and creates a positive attitude towards entrepreneurship. The extensive and diverse network of business competent individuals associated with the Venture Cup BPC is highlighted as one of its main strengths. After more than a decade of dedicated effort, the impact of Venture Cup can be seen

to be in the academic ecosystem a very cost-effective instrument for stimulating entrepreneurship and new business creation.

## **CONCLUSIONS**

During the past decade, the Venture Cup BPC has established itself as one of the major business plan competitions in the world. It has significantly contributed to job creation, especially in the high tech area. Venture Cup provides an important arena in the academic setting, where presumptive entrepreneurs can test their business ideas. The knowledge creation and learning outcomes have been significant over the 14 years of the existence of the competition. Building on a simple and straightforward concept of formulating a business idea and a market plan, which is refined in an investment ready business plan, Venture Cup has significantly contributed to job creation. This is especially evident in the high tech area. The Venture Cup BPC has proven to be a concept upon which high-tech and service companies can be built. The feedback provided to the contestants is generally positive and solution seeking. This provides the entrepreneurs with a possibility to refine and grow their business idea into

a dynamic company. Venture Cup is and should remain an unpretentious test bed for new ideas, and by being just that, Venture Cup has demonstrated its potential as a value creating network for innovators, entrepreneurs, academia, as well as regional government and the business community.

An important conclusion from a sustainable development perspective is that the acceptance of academic BPC initiatives must be actively facilitated in terms of support from the university administration and support from the large number of external interest groups for which programs are designed.

### **BIOGRAPHY**

**Karl Maack** graduated a technology master in Innovation and entrepreneurship at Chalmers University of technology (Sweden) and founded the medical Device company SenCere Medical AB. In the last 2 years Karl has been managing this venture as well as working with establishing the department of Innovation and entrepreneurship at the medical faculty at Gothenburg University. Karl is now employed at the university working with development of pedagogic approaches och distance education. As a PhD student

the research focus is on business plan competitions and their outcomes as well as e-learning and International entrepreneurship.

**Professor Magnus Klofsten** is professor At Linköping University in Sweden, at the Department of Management and Economics. He is the founding director of the Centre for Innovation and Entrepreneurship HELIX VINNOVA. His research interest relates to early development processes in knowledge intensive businesses, business support systems, idea development and University - industry links.

**Professor Thomas Hedner** holds MD, PhD and MBA exams from the University of Gothenburg in Sweden. He is currently responsible for Innovation and Entrepreneurship at Sahlgrenska Academy. He has published extensively in medicine, especially in cardiovascular medicine and new drug development. In economics, his research interest extend to open innovation, entrepreneurship orientation and decision analysis in complex project management.

### **REFERENCES**

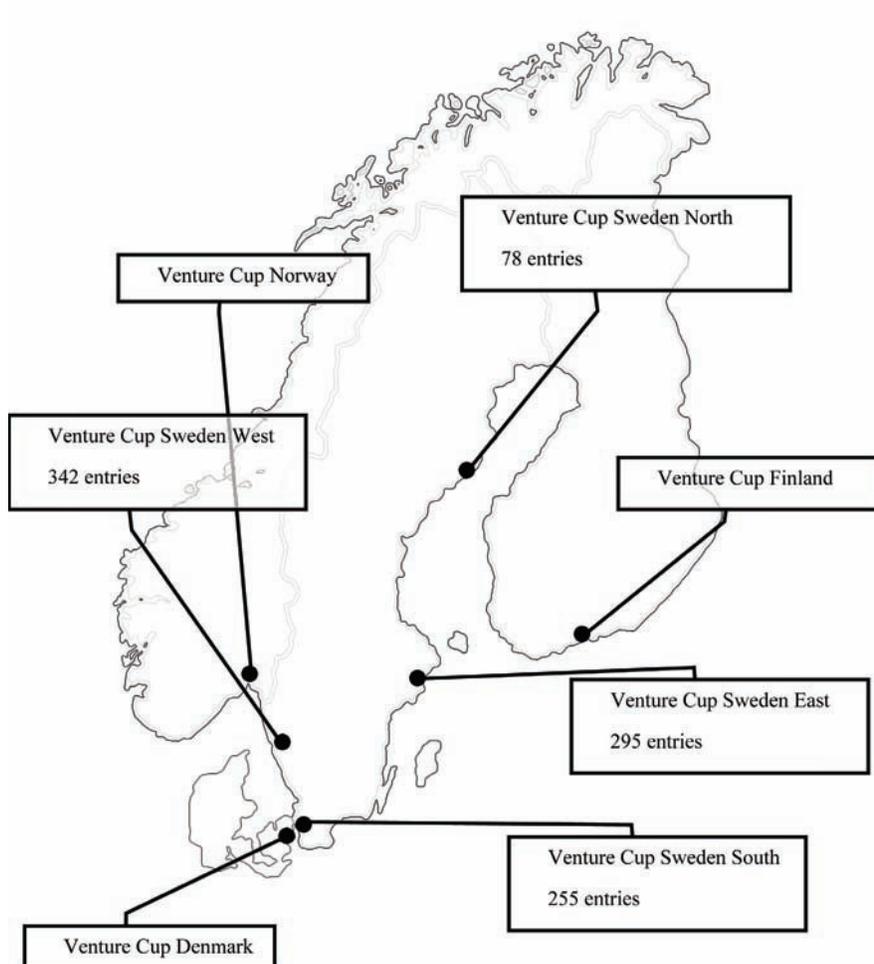
Curran, J. and Stanworth, J.  
(1989) 'Education and

- training for enterprise: Some problems of classification, evaluation, policy and research', *International Small Business Journal*, 7(2), 45-58.
- Davidsson, P. (1989) 'Continued entrepreneurship and small firm growth', *PhD thesis*, Stockholm School of Economics, Stockholm.
- Delmar, F., Sjöberg, K. and Wiklund, J. (2003) 'The involvement in self-employment among the Swedish science and technology labour force between 1990 and 2000', *Stockholm: ITPS A2003: 017*.
- Etzkowitz, H. E., Webster, A., Gebhardt, C. and Terra, B. R. C. (2000) The future of the university and the university of the future: evolution of ivory tower to entrepreneurial paradigm, *Research Policy* 29 \_2000. 313-330.
- Etzkowitz, H. E., and Klofsten, M. (2005) 'The innovative region: Toward a theory of knowledge-based regional development. *R&D Management*, 35(3), 243-255.
- Garavan, T. N., and O'Conneide, B. (1994) 'Entrepreneurship education and training programmes: A review and evaluation - Part 1', *Journal of European Industrial Training*, 18(8), 3-12.
- Hedner, T., Edgar, B., Maack, K. and Abouzeedan, A. (2010) 'Innovation and Entrepreneurship curricula at Swedish Universities - Theoretical, tacit and narrative learning aspects', In "*Innovation and Entrepreneurship in Universities*", Ed Marja-Liisa Neuvonen-Rauhala, *Proceedings of the 3rd International FINPIN Conferences Joensuu, Finland*, pp 150 - 162. A publication Series of Lahti University of Applied Sciences, Series C, Part 72; ISSN 1457-8328; ISBN 978-951-827-112-6.
- Hedner, T. (2011) 'How to implement an innovation and entrepreneurship curriculum', *Global Focus EFMD*, June 2011.
- Klofsten, M. and Spaeth, M. (2004) 'Entrepreneurship training for regional growth and innovation: A Swedish case study and ten year retrospective', *Paper presented*

- at the ICSB 49th world conference, Johannesburg, South Africa, June 20-23.
- Klofsten, M. and Mikaelsson, A.S. (1998) 'Support of technology-based SMEs: An analysis of the owner managers attitude', *During, W and Oakey, R.P (red.), New technology small firms in the 1990s*, Vol. 4, sid., 71-80, Paul Chapman Publishing, London.
- Klofsten, M. and Wiklund J. (2005). 'Venture Cup report', government report on the venture cup business plan competition.
- Klofsten, M. (2008). 'Supporting academic enterprise: A case study of an entrepreneurship programme', *In; New Technology Based Firms in the New Millennium*, Volume VI, Eds A. Groen, R. Oakey, P. van der Sijde and G. Cook. Emerald Group Publishing Ltd.
- Klofsten, M. and Norrman, C. (2010) 'Venture Cup - En studie av intressenternas aktiviteter', a government report on the Venture Cup business plan competition.
- Maack, K., Thornblad, T., Abouzeedan, A. and Hedner, T. (2010) 'Business plan competitions in an academic setting - a concept overview and its connection to the venture creation process', *In World Association for Sustainable Development (WASD) Outlook*, Stockton, NJ, USA, pp xx - xx.
- Roberts, E. B. and Eesley, C. E. (2009) 'Entrepreneurial Impact: The Role of MIT' (February 1, 2009). Available at Social Science Research network: <http://ssrn.com/abstract=1352633>
- Wallmark&Sjösten (1994) - Wallmark, T., & Sjösten, J. (1994). Stability and turbulence among spin-off companies from Chalmers University. Paper presented at the 8th Nordic Congress of Small Business Research, Halmstad, Sweden.
- Venture Cup (2011) (se URL: <http://www.venturecup.se/>)

**FIGURES AND TABLES**

**Figure 1.** A schematic representation of the geographical reach and number of contestants in the venture cup BPC 2010.



**Table 1.** Characteristics of the 2003 Venture Cup study population.

<b>Employment status</b>	<b>n</b>	<b>%</b>
Graduate student	342	51
Doctoral student	43	6
PhD, researcher	38	6
Employment outside academia	80	12
Self-employed	107	16
Looking for work	30	4
Other	31	5
<b>Total</b>	<b>671</b>	<b>100</b>

**Table 2.** Business sector of the 2003 Venture Cup competition entries (Klofsten and Wiklund 2003).

<b>Business sector</b>	<b>n</b>	<b>%</b>
IT, software	128	19
Electronics, hardware	66	10
Health sector	67	10
Culture and leisure	40	6
Biosciences, environment, chemistry	31	5
Consulting	35	5
Trade	32	5
Food	26	4
Telecom	25	4
Media	26	4
Transport	25	4
Construction, Property	22	3
Tourism, hotel	19	3
Education	19	3
Clothing, fashion	13	2
Design, art	7	1
Banking, finance	9	1
Other	71	11
<b>Total</b>	<b>661</b>	<b>100</b>

**Table 3.** The state of development of the product/service at the time of the competition (Klofsten and Wiklund 2003).

Developmental stage	n	%
No clear idea developed	67	10
Only at idea stage	211	31
Early product/service development	201	30
Product/idea tested on customer	79	12
Product/service ready developed	39	6
Product/service available on the market	79	12
<b>Total</b>	<b>676</b>	<b>100</b>

**Table 4.** Financing status of the Venture Cup competition entries (Klofsten and Wiklund 2003).

External financing	n	%
None	501	67
Venture capital	39	5
Business angel financing	18	2
Bank financing	16	2
Contributions/start-up financing from Cluster	106	14
Other	79	10
<b>Total</b>	<b>759</b>	<b>100</b>

**Table 5.** The principal set-up and strategy of the Venture Cup competition – from business idea to investment ready business plan (Venture Cup – a Nordic business plan competition in 4 steps).

Step 1	Step 2	Step 3	Step 4
Business Idea; Regional	Market Plan; Regional	Complete Business Plan; Regional	Sweden Finals
Hand-in: 2 pages	Hand-in: 12 pages	Hand-in: 20 pages	Hand-in: 20 Pages
November year 1	February year 2	March year 2	May year 2
Prize:		Prize:	Prize:
1 <sup>st</sup> -10 <sup>th</sup> 10000 SEK Service 5000 SEK + Consulting services		1 <sup>st</sup> 200000 SEK 2 <sup>nd</sup> 100000 SEK 3 <sup>rd</sup> 50000 SEK Service 20000 SEK + Consulting services	1 <sup>st</sup> 200000 SEK 2 <sup>nd</sup> 100000 SEK 3 <sup>rd</sup> 50000 SEK Each winner also gets 3 weeks of full time consulting from McKinsey & Company

**Table 7.** Some illustrative and representative case examples of fast growing or high potential start-up companies originating from the Venture Cup business plan competition.

Company	Product/service	Location	Est.	No. employed	Venture Capital	2010 Turnover	Main owner
Applied Nano Surfaces	Low-adhesion surface	Uppsala, Sweden	2008	7	15 MSEK	3,4 MSEK	Founders, Fourier transform, the Sixth AP Fund
Nanologica	Transparent solar cells	Stockholm, Sweden	2004	18	23 MSEK	3,7 MSEK	Funders
Bambuser	Live feed from mobile phones	Stockholm, Sweden	2007	12	25 MSEK	0 SEK	Founders, Almi Invest
Hövding	Invisible bike helmet	Malmö, Sweden	2006	14	30 MSEK	0 SEK	Funders
Mindmaner	Protects schools	Gothenburg, Sweden	2006	13	13 MSEK	8,2 MSEK	Chalmers Innovation SeedFund, Chalmers Innovation and Innovationsbron
Minesto	Tidalenergy	Gothenburg, Sweden	2007	10	40 MSEK	750 000 SEK	Founders, MIDROC New Tech, SAAB and BGAINvest