

Article

# Do the strategies lead to the formation of an entrepreneurial higher education institution? – Case Finland

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**Abstract:** Today, globally, higher education is facing unprecedented challenges such as Covid-19, climate change, urbanization, and digitalization. One significant European response in higher education is seen in the development, in concept and in practice, of the ‘Entrepreneurial University’. The concept of entrepreneurial university is strategically important for the management as there are two main benefits of implementing the concept i.e. (1) the university is more capable to cope with the turbulent and unpredictable environment and (2) it is able to provide the students with the opportunities to become academic entrepreneurs. In this paper the case study of half of the Finnish universities of applied sciences is presented. The main research question is: Are the Finnish universities of applied sciences entrepreneurial? The analysis was conducted by using OECD’s framework on entrepreneurial university. As a result, two categories of entrepreneurial universities were discovered: (1) holistically entrepreneurial universities and (2) partly entrepreneurial universities. The main difference between these groups of UASs was found on how the strategies of these institutions lead to the creation of entrepreneurial university.

**Keywords:** entrepreneurial university, strategic management, profe

## 1 Background of the study

The Finnish higher education system underwent a fundamental reform in 1990’s when universities of applied sciences (UAS) were created as a new form of higher education with the purpose of better taking into account the challenges of working life. Globally this professional higher education sector is still quite new and transforming quickly (Laakso-Manninen & Tuomi, 2020). International evaluators have deemed Finland’s reform a resounding success (Laakso-Manninen & Tuomi, 2020). But are these institutions entrepreneurial themselves?

Today, globally, higher education is facing unprecedented challenges such as Covid-19, climate change, urbanization, and digitalization. One significant European response in higher education is seen in the development, in concept and in practice, of the ‘Entrepreneurial University’ (OECD 2012). According to Gibb et al. 2009, there is considerable international literature addressing the entrepreneurial university on a wider range of issues such as philosophical ‘idea’ of a university (Mendoza and Berger, 2008), commercialization of the

know-how (Cook et al 2008), the process of technology transfer (Zhou 2008), university-business collaboration (European Commission 2018), employability of the graduates (Leitch 2006) and internationalization and the societal changes (Senges 2007).

## 2 Entrepreneurial university and the linkage to the strategy

During the past decade, the model of entrepreneurial university has been considered as a major driver for self-development and innovation and as an appropriate response to succeeding in highly turbulent and unpredictable markets (Hannon, 2013). Beside this, the 'entrepreneurial university' has gained prominence as a knowledge and innovation actor, a key to competitiveness, stimulation of economic growth and wealth creation in today's globalized world (Fayolle & Redford, 2014).

Baldini et al. (2014) clarify the concept by saying that the entrepreneurial university can be understood at the institutional level, whereas academic entrepreneurship refers to the activities and roles undertaken by individuals. Thus, we argue that, to develop academic entrepreneurship i.e. students' entrepreneurial skills and to promote entrepreneurship by providing e.g. start-up services and accelerators, the higher education institution should be entrepreneurial itself.

According to Hannon (2013) the most challenging change, as in many complex organizations, is the realignment of organizational values and culture and changing the mindsets of individuals. Bezanilla et al. (2020) found a correlation between a university's mission, strategy, policies, and procedures with all the entrepreneurship factors in their analysis. Despite this, a strong relation was found between the mission and strategy and the education and research processes (Olalla et al., 2020). Thus, according to previous research, the university's strategy plays an important role in ensuring the change towards entrepreneurial university as well as ensuring the sustainability of the concept.

In sum, the concept of entrepreneurial university is strategically important for the management as there are two main benefits of implementing the concept i.e. (1) the university will be more capable to cope with the turbulent and unpredictable environment and (2) it is able to provide the students with the opportunities to become academic entrepreneurs.

## 3 The research question

To lead the process to become an entrepreneurial institution, the top managers should ensure that the strategies feed the change (Gibb et al., 2009). Thus, the research question will be analogous with the question stated by OECD (2012): *Are the Finnish Universities of Applied Sciences entrepreneurial?*

The research data consists of the strategies and other published strategic documents (i.e., annual plans, entrepreneurship service sites etc.) of Finnish universities of applied sciences. The data was collected in 2019–2020 by the authors. The content analysis of the strategies will be proceeded and it will be focused on the values, visions, and mission statements as well as to specific profiles, objectives or focus areas stated by the institution. In addition, the aim is to analyze performance indicators which may lead to the entrepreneurial

institution (such as generation of entrepreneurial competences, start-up support, spin offs, entrepreneurial mindset of the staff etc.).

#### 4 OECD framework as a tool for the analysis

OECD (2012) created a framework for the analysis of the entrepreneurial university for those

institutions looking for advice, ideas, and inspiration for the effective management of institutional and organizational change. This framework was produced under the aegis of the European Commission's DG Education and Culture, in collaboration with the OECD LEED forum, and supported by a panel of six independent experts in this field (OECD 2012). The framework consists of seven areas which should contain the entrepreneurial philosophy: (1) leadership and governance, (2) organizational capacity, people and incentives, (3) entrepreneurship development in teaching and learning, (4) pathways for entrepreneurs, (5) university-business/external relationships for knowledge exchange, (6) the entrepreneurial university as an internationalized institution and (7) measuring the impact of the entrepreneurial university. (OECD 2012). The analysis of Finnish UASs followed the guidelines of the framework described in Table 1.

The area of the analysis	The sub-elements
1. Leadership and governance	<ul style="list-style-type: none"> <li>- entrepreneurship is a major part of the strategy</li> <li>- high level responsibility on entrepreneurship in organisation</li> <li>- university is driving for on entrepreneurship in the region</li> </ul>
2. Organizational capacity, people, and incentives	<ul style="list-style-type: none"> <li>- staff and students are important internal stakeholders</li> <li>- sustainable financing for entrepreneurial activities</li> <li>- staff development and recruiting support</li> <li>- the development of entrepreneurial activities</li> </ul>
3. Entrepreneurship development in teaching and learning	<ul style="list-style-type: none"> <li>- organization support the entrepreneurship development (senior lecturers, units etc.)</li> <li>- entrepreneurship in wide variety of curricula / activities</li> </ul>
4. Pathways for entrepreneurs	<ul style="list-style-type: none"> <li>- staff and student development activities</li> <li>- access to external financing for e.g. start ups</li> <li>- specific activities e.g. start-up services, acceleration</li> </ul>
5. University-Business/external relationships for knowledge exchange	<ul style="list-style-type: none"> <li>- commitment for u-b relationships</li> <li>- staff and student mobility between business – university</li> </ul>

6. The entrepreneurial university as an internationalized institution	<ul style="list-style-type: none"> <li>- international mobility of staff and students</li> <li>- university seeks to attract international staff members</li> </ul>
7. Measuring the impact of the entrepreneurial university	<ul style="list-style-type: none"> <li>- assessment activities on entrepreneurial activities (1-6)</li> </ul>

Table 1. The analysis framework of entrepreneurial university (modified OECD 2012)

As a method, a case study of eleven Finnish universities of applied sciences was conducted. According to Yin (2003), the method is good for describing a situation or phenomenon occurring in the present. Yin presents three types of case analysis: (1) exploratory, (2) descriptive, and (3) explanatory. In Finland, all the universities have updated their strategies during 2019 and 2020 in the framework of the new vision for higher education (Ministry of Education and Culture, 2020). Thus, the period of the analysis has been fruitful to conduct a descriptive analysis of the strategies and to understand more in-depth the real-life situation of the UASs.

The published strategies of the case UASs provided the core material to provide understanding on how entrepreneurial these institutions are or aim to become. In addition to the strategies, multiple set of published materials were analyzed (annual reports, service descriptions, organization chart, governance structure etc.). The material was collected from the websites of the UASs.

The time frame of the analysis imposed some limitation on the study. Thus, this research is merely the first phase of the wider analysis of Finnish UASs in the framework of entrepreneurial university. In this respect, for example interviews and observations could be applied in the future studies to analyze how the written and explicit strategies are implemented in the real-life. Today, the UASs have just started the implementation of their renewed strategies. Therefore, the interviews and observations would have not provided value added at this stage.

As a result of the case analysis, two categories of UASs were identified. The categories were named as follows: (1) holistically entrepreneurial university, (2) partly entrepreneurial university. The holistically entrepreneurial universities provided evidence for the most of the criteria on OECD's framework. In the strategies, the entrepreneurship and entrepreneurial elements were clearly stated. On the UASs selected to the second category (partly entrepreneurial UAS) evidence at least for one of the OECD criteria was found. However, the strategic approach was dimmer than on the first category.

For the analysis 11 of 24 Finnish UASs were selected to the case analysis. Two of the UASs were excluded from this study due to their specific role. One of these is in Åland which is autonomous, demilitarized and monolingually Swedish speaking region. The other one is focused on police academy education, and it is operated under the direction of the Finnish Ministry of the Interior. Thus, the eleven cases represent the half of the UASs in Finland operating in the Ministry of Education and Culture's administrative branch. These UASs differ in their size, location, and origin. The smallest case UAS has 2 619 students and the largest 16 245 students. The selected UASs locate in different parts of Finland, five of them in the largest cities in Southern Finland and the rest in West, East, Middle and in the Northern Finland. Today, the form of governance structure is

based on a limited company structure. The UASs are privately owned (e.g., by foundations) or publicly owned (by cities and municipalities).

## 5 The holistically entrepreneurial UASs

In total of six UASs represent the category of holistically entrepreneurial universities. The common aspect of all these case UASs was that they were strongly led by a strategy in which entrepreneurship was involved. The meaning of entrepreneurship was strongly recognized to be an essential part of the university's identity. The president himself or herself was personally active on promoting entrepreneurship. For example, he or she continuously discussed the importance of entrepreneurship on his or her speeches and presentations on the strategy of the UAS. The elements of the strategy, from which entrepreneurship was found, were mainly the vision, the mission, the focus areas and/or the values. Moreover, the entrepreneurship was found in the strategic goals and targets which were ambitious of their nature.

Governance structure did not seem to effect to the strength of entrepreneurial university. There were both privately owned as well as municipally owned UASs which were strongly entrepreneurial. However, in most of the strongly entrepreneurial UASs the context and the history of the UAS seem to have its effect. For example, in one of the case UASs the region has strong roots in entrepreneurship and this traditional focus is still strong today. Another case UAS locate in Northern Finland and, thus, entrepreneurship is seen from the regional perspective being one of the crucial issues for the survival of the region. Thus, the regional strategies seem to have a strong reflection in these case UASs. Also, in two cases the strong connection to the specific industry (e.g. service and industrial sectors) seem to have created strong relation to the businesses and strong interest in entrepreneurship and entrepreneurial activities.

The entrepreneurial UASs have a strong will to maintain their teachers and experts working life competences updated. Moreover, the working culture of the university seems to be based on entrepreneurial attitude. In order to support both the competence and culture development in some of the case UASs the staff members have been encouraged to update their knowledge by working a certain period of time in businesses either in Finland or abroad. Moreover, in one of the case UASs, several lecturers and experts have been able to run their own enterprises during their career. Also, the result-based salary policies have been applied at least in one of the case UASs.

In some of the case UASs entrepreneurship was included into all degree programs and their curricula. The entrepreneurial services covered wide range of services both for the students and businesses: basic studies, entrepreneurial learning paths, several kinds of innovation forums and communities as well as in some cases even venture capital.

Also, one of the main aspects for these strongly entrepreneurial universities was that the research, development, and innovation activities were focused on business development (e.g., industry-specific focuses). In addition, the R&D&I activities were carried out in close collaboration with enterprises.

One of the case UASs stated that their aim is not only to support the students to start their own enterprises but to provide all of them with an entrepreneurial

identity. Moreover, one of the case UASs stated that their role is not only to encourage the students to become entrepreneurs but to support their companies to grow and to enter the international market. A wide range of services were identified in the cases: paths for entrepreneurship, coaching, team entrepreneurship, real-life innovation projects, accelerator services as well as start-up academies.

The entrepreneurship services both for students and businesses were made easily available through websites. One of the case UAS provided a web-shop for business services and several case UASs had opened web-portals in which all the entrepreneurship services were available. One of the best practices found was a portal on which several tools for business development and growth were made available for the local businesses.

On the holistically entrepreneurial case UASs, there were several best practices on how they have created themselves into an internationalized institution. For example, in some of the cases all the degree programs are offered in English. One of the cases reports that there are annually about 150 visiting professors and lecturers from their international partner institutions. Moreover, one of the case UASs aims to become an active player in global education services. Noteworthy, one of the case UASs aims to integrate their international students by supporting them to become entrepreneurs in the region.

The strongly entrepreneurial UASs measured actively the success of their strategy. Some of the case UASs seem to be even very ambitious on setting their goals. The measures covered topics such as the number of new start-ups for the region, the number of students as entrepreneurs, the external R&D&I funding (e.g., 50% of the total), the number of business partners, the number of credits on entrepreneurship courses. The regional impact seems to be one of the main indicators. It is measured by the number of employed graduates, graduates who have become entrepreneurs, projects, service assignments as well as tax income generation for the region.

## **6 The partly entrepreneurial UASs**

In total five of the case UASs represent the second category i.e. the partly entrepreneurial universities. The main difference between the holistically and partly entrepreneurial UASs was found on their strategies, which in the latter cases did not contain the elements of entrepreneurial university. Thus, it can be argued that the entrepreneurial activities were not led by the strategies. These UASs focused their strategies mainly to the regional development or, as one of the case UASs states, their focus is the student.

However, the idea of the entrepreneurial university may be found indirectly as all these case UASs described in their strategies that they focus on the collaboration with the “working life” (including both the public and private sectors). The governance structure of UASs did not seem to have an effect on how entrepreneurial the UAS will become. They were owned by the municipalities and/or cities. In two of the cases there were also academic universities as owners.

The development of the entrepreneurial capacity of teachers and other staff members was not clearly visible on the partly entrepreneurial universities. Despite this, many of them highlighted the importance of the continuous

development of their staff members. Thus, for example one of the case UASs provided possibilities for their teachers and experts to participate in an “internship” in the working life. Interestingly, one of the partly entrepreneurial case UAS stated that their focus is on developing the entrepreneurial attitude of their staff members as we students. Also, one of the partly entrepreneurial UAS which did not mention entrepreneurship in the strategy however provided workshops for their teachers to learn entrepreneurial skills.

All the partly entrepreneurial case UASs highlighted their role in developing working life competences of their students. The campuses were described to be open learning environments on which the student’s wellbeing as well as learning opportunities were in focus. Also, many forms for the learning with the working life were described. The only difference between holistically entrepreneurial UASs was that entrepreneurship was not in the focus or it was found on separate services or on joint entities with partner universities.

Even though these case UASs were not strongly entrepreneurial, some aspects of the approach were found. First, most of these case UASs provided entrepreneurial services. Second, the services were decentralized e.g. in a way that only one specific degree program was offering the services. Third, the selection of the services seemed to be narrower than in the strongly entrepreneurial case UASs. Fourth, the services were ‘outsourced’ and provided by e.g. a regional entrepreneurship service hub.

Even though the strategies did not focus on entrepreneurship, the research, development and innovation activities were conducted with SME partners. Some of the case UASs offered excellent innovation programs where the students and companies were innovating together.

The university-business collaboration was strong in all five case UASs. The collaboration seemed to focus on larger organizations and businesses. Also, the business representatives invited to the boards or the advisory boards of the UASs were mostly representing larger companies. Thus, only a few representatives from small and medium sized enterprises were presented in these forums.

The partly entrepreneurial UASs all highlighted the internationalization in their strategies. These institutions had a wide range of international partner universities providing learning opportunities for the students. Entrepreneurship and its connection to internationalization strategies were not visible in these case UASs.

The partly entrepreneurial UASs measured some basic indicators of entrepreneurship e.g. the number of students starting their enterprises. Even though some of the case UASs provided several entrepreneurial services to the start-ups and regional companies, these measures were not published, or they were not publicly available. Also, in some annual reports of the partly entrepreneurial UASs, entrepreneurship was completely missing. There might be a logical explanation for this. If entrepreneurship is not in the strategy, there are no goals or actions which should be implemented and measured.

To sum, the vocabulary of the strategies of the partly entrepreneurial case UASs was lacking entrepreneurship. However, in some cases the vocabulary may indicate that the strategy includes entrepreneurship, too. For example, one of the case UASs discussed the strategic focus on the regional ‘community’. The

community may be interpreted to cover the entrepreneurs. Another observation was that it was difficult to find the entrepreneurship services or information on entrepreneurship education on the website of these partly entrepreneurial UASs. This may be the result of the decentralized organization of entrepreneurial services as well as of the fact that strategies did not lead the implementation of entrepreneurial university.

## 7 Conclusions

This study was a novel approach to understand more deeply the role of the strategies in leading the transformation of universities towards entrepreneurial university. Half of the Finnish universities of applied sciences were selected to the case research. As an analytic frame, the OECE model was used. As a result, none of the cases were completely without the content of entrepreneurial university. In all, six of the UASs were strongly and five partly entrepreneurial.

The main difference was on how the strategies led the implementation of the entrepreneurial university. In the holistically entrepreneurial UAS, the role of the strategy seemed to be strong as in these institutions the entrepreneurship was widely present in the organization. In the partly entrepreneurial UAS the entrepreneurship was present in only specific activities (e.g., in one of the degree programs) and/or the services were provided by separate entities. In these UASs entrepreneurship or the idea of entrepreneurial university were not the 'mainstream' of the management of the organization.

The contribution of this study is on the finding that the strategies are of importance for the universities if they aim to create an entrepreneurial university of themselves. The strategies and the role of strategic management is of importance in creating strongly entrepreneurial universities. Of course, as stated before, this study has its limitations. The analysis was made based on the public websites of the universities. Thus, in the future, it would be beneficial to analyze the implementation of the strategies in the real-life context of the universities. This approach would lead to a deeper understanding of the creation, transformation, and implementation of entrepreneurial universities. Also, it would be beneficial to analyze the whole sector of the Finnish universities of applied sciences as there was an especially interesting finding on the Finnish UASs: none of them were completely without any elements of entrepreneurial university. Is entrepreneurship a part of the DNA of all Finnish universities of applied sciences? Finally, we would like to encourage researchers to conduct analyses in their home countries. The data collected in different countries would provide support for the national and regional development of educational policies on entrepreneurial universities leading to universities which are more capable to cope with the turbulent environment as well as to recover from Covid-19.

## References

Baldini, N., Fini, R., Grimaldi, R., & Sobrero, M. (2014). Organisational change and the institutionalisation of university patenting activity in Italy. *MINERVA*, 52, 27–53.

Bezanilla, M. J., García-Olalla, A., Paños-Castro, J., & Arruti, A. (2020). "Developing the Entrepreneurial University: Factors of Influence," *Sustainability, MDPI Open Access Journal*, 12(3), 1–19.

<https://ideas.repec.org/a/gam/jsusta/v12y2020i3p842-d312284.html>



Cook, T., Dwek, T. R., Blumberg, B., & Hockaday, T. (2008). Commercialising University Research: Threats and Opportunities. The Oxford Model. *Capitalism and Society*. Vol. 3, issue 1. Article 4.

European Commission. (2018). *The State of University-Business Cooperation in Europe: Final Report*. Publications Office of the European Union. Available online: [https://www.ub-cooperation.eu/pdf/final\\_report2017.pdf](https://www.ub-cooperation.eu/pdf/final_report2017.pdf)

Fayolle, A., & Redford, D. (2014). Introduction: Towards more entrepreneurial universities - myth or reality? In A. Fayolle, & D. Redford (Eds.), *Handbook on the entrepreneurial university* (pp. 1–10). Edward Elgar.

Gibb, A., Haskins, G., & Robertson, I. (2009). *Leading the Entrepreneurial University*. University of Oxford: Said Business School.

Hannon, P. (2013). Why is the Entrepreneurial University Important?. *Journal of Innovation Management*. Vol. 1. No. 10.

Laakso-Manninen, R., & Tuomi, L. (2020). *Professional Higher Education Management. Best Practices from Finland*. Professional Publishing Finland Oy.

Leitch, S. (2006). *Prosperity for all in the Global Economy. World Class Skills*. HMSO Norwich UK.

Mendoza, P., & Berger J. B. (2008). Patenting Productivity and Intellectual Property Policies at Research in Universities: An Exploratory Comparative Study. *Education Policy Analysis Archives*, Vol. 13 No. 4.

Ministry of Education and Culture. (2020). *Vision for higher education and research in 2030*. <https://minedu.fi/documents/1410845/12021888/Vision+2030+roadmap/6dfddc6f-ab7a-2ca2-32a2-84633828c942/Vision+2030+roadmap.pdf> [Last accessed 10 Oct 2020]

OECD and European Commission (2012). *Guiding Framework for Entrepreneurial Universities*. Available online: <https://www.oecd.org/site/cfecpr/EC-OECD%20Entrepreneurial%20Universities%20Framework.pdf>

Senges, M. (2007). *Knowledge Entrepreneurship in Universities. Practice and Strategy in the Case of Internet Based Innovation Appropriation*. Doctoral Thesis. Universitat Oberta de Catalunya Barcelona Spain.

Zhou, C. (2008). Emergence of the Entrepreneurial University in Evolution of the Triple Helix. *Journal of Technology Management in China*, 3(1), 109–126.

Yin, R. K. (2003). *Case Study Research: Design and Methods*. (3rd ed.) Sage. John Wiley & Sons.