

5 Organisational Capacity: Funding, People and Incentives

Entrepreneurial organisations encourage individuals, units and departments to reach across internal boundaries, to seek multidisciplinary collaborations and to connect to external organisations at the local, regional and national level. The majority of HEIs and RIs see themselves as playing a role in the so-called “triple helix” of government, education and industry as they work to create economic, social and cultural value in Lithuanian society. To build on these strengths will require more key performance indicators.

Introduction

Organisational capacity is the ability of a higher education institution (HEI) or research institute (RI) to deliver on its strategy. If an organisation is committed to greater innovation, and to taking a more entrepreneurial approach to its core activities, key resources, such as funding and investments, people, expertise and knowledge, and also incentive systems, must be in place to increase its capacity for entrepreneurship.

This chapter explores four key behaviours of entrepreneurial organisations:

1. Making a strategic commitment to become more entrepreneurial and using key performance indicators to monitor and improve performance.
2. Using the key resources of funding and people to support the achievement of strategic objectives.
3. Designing and using incentives and rewards to sustain and increase organisational capacity.
4. Providing ongoing staff development to support the transformation of an organisation.

These behaviours of entrepreneurial organisations are incorporated into the HEInnovate Framework for Organisational Capacity: Funding, People and Incentives (see Box 5.1).

Box 5.1. Organisational Capacity: Funding, People and Incentives in the HEInnovate Framework

The HEInnovate Framework defines the organisational capacity as the ability of an HEI to deliver on its strategy. If an HEI is committed to carrying out entrepreneurial activities to support its strategic objectives, then key resources such as funding and investments, people, expertise and knowledge, and incentive systems need to be in place to sustain and grow its capacity for entrepreneurship.

Characteristics of this dimension include:

1. Entrepreneurial objectives are supported by a wide range of sustainable funding and investment sources.
2. The HEI has the capacity and culture to build new relationships and synergies across the institution.
3. The HEI is open to engaging and recruiting individuals with entrepreneurial attitudes, behaviour and experience.
4. The HEI invests in staff development to support its entrepreneurial agenda.
5. Incentives and rewards are given to staff who actively support the entrepreneurial agenda.

Source: HEInnovate (n.d.^[11]), *Home Page*, <https://heinnovate.eu>. Accessed 05 October 2021

Strategy and key performance indicators

Strategy

Entrepreneurial organisations encourage individuals, units and departments to reach across internal boundaries, to seek multidisciplinary collaborations and to connect to external organisations at the local, regional and national level. HEIs and RIs in Lithuania expressed a strong commitment to an entrepreneurial role, which they consider to be aligning themselves with the practical needs of society. They see

themselves as playing a role in the so-called “triple helix” of government, education and industry, as they work to create economic, social and cultural value in Lithuanian society.

In discussion, HEIs and RIs reported that their own strategies are closely aligned with national government policies. This is facilitated by a number of formal mechanisms to encourage dialogue between the Ministry of Education, Science and Sports, the HEIs and RIs, including such groups as the Lithuanian University Rectors’ Conference, which co-ordinates relationships between rectors (directors) of HEIs and state government, administrative and municipal institutions. The Conference aims to promote Lithuanian scientific, educational, cultural and economic development, co-operation between HEIs and international networking, as well as co-operation with government authorities and local government. A comparable role is played by the Rectors’ Conference of Lithuanian University Colleges, an association grouping the Rectors of 12 Lithuanian state and 7 private Universities of Applied Sciences.

HEIs and RIs are also able to enhance the alignment of national and organisational priorities by providing input for a variety of working groups that advise the Ministry. In discussion, HEIs confirmed that they have provided expert advice to the Ministry and its working groups on a wide range of topics, including HE policy, the missions of individual HEIs, the remuneration of staff, health technologies, smart specialisation, ICT, agriculture, food technology, photonics and energy. The LSMU, for example, noted how its research on alcohol and tobacco could be used to inform national policy discussions on taxation.

Representatives of HEIs also provide expert advice to many organisations, professional associations and expert groups at both the national and municipal level, including the Research Council of Lithuania and the Lithuanian Academy of Sciences and the Lithuanian Scientific Society. The wide range of subjects and disciplines offered for study and research were seen as enabling HEIs to take a multidisciplinary approach in responding to priorities in both the private and public sectors. In discussion, all HEIs mentioned the success of the recent work by expert groups at the local and national level in response to the COVID-19 pandemic.

HEIs and RIs reported that they value strategic collaborations with each other, with Lithuanian business and society, and with organisations in the Baltic, Europe and internationally. This can increase organisational and national capacity by providing access to additional physical and intellectual resources.

One example of a strategic collaboration focusing on innovation, creativity and societal impact is the European Consortium of Innovative Universities (ECIU), a network of 12 European universities of which Kaunas University of Technology is a member. The ECIU, founded in 1997, is a select group of entrepreneurial universities funded by the EU that aims to create a new educational model on a European scale. It brings together students, teachers and researchers to co-operate with cities and businesses on solving real-life challenges, and to work on grand challenges such as the UN Sustainable Development Goal 11, “Sustainable cities and communities”. The Rector of Kaunas University of Technology and a representative of the university’s student union sit on the ECIU Board.

Another example of a strategic collaboration, this time for the purpose of improving technology transfer, is TTO Lithuania, which is a partnership between five Lithuanian universities: Vilnius University, Kaunas University of Technology, Vilnius Gediminas Technical University, the Lithuanian University of Health Sciences and Klaipėda University. Its long-term perspective is to establish a regional network of the Baltic states with institutions in neighbouring countries, with the aim of uniting knowledge and technology transfer professionals working in science and study institutions, and to create opportunities for them to exchange professional practical knowledge and raise competence in the field of intellectual property management.

Key performance indicators

Discussions with HEIs and RIs explored how they evaluate the success of their strategies and entrepreneurial objectives. HEIs were able to cite examples of indicators that could be used to make these judgements, such as the overall level of government funding, successful competitive bids for additional funding, the level of money they attracted from industry, the number and quality of research papers, the number of patents registered and the number of start-ups created by doctoral students and academic researchers. It should be noted that some of these indicators are more relevant to the universities than the colleges, since colleges receive less research funding than universities.

HEIs noted, however, that they do not common practice for HEIs to benchmark their performance against each other or against other HEIs in Europe. They noted that there is some limited but useful information can be found on the websites of Lithuanian HEIs but that there is no common data set that is either supplied or analysed by all HEIs. It was noted that HEIs can be reluctant to make such comparative judgements, since this could be perceived as being “impolite” in a system that values collegiality.

Comparisons between Lithuanian and European HEIs in terms of innovation and entrepreneurship performance, for example, are typically made on an informal basis, using a tacit understanding developed as a result of participation in strategic partnerships, connections to industry, memberships of professional bodies, delivery of joint projects and by attendance at conference and other events. No agreement has been concluded between organisations about the indicators that could be used for benchmarking their performance, and no evaluations are currently undertaken.

One example of a methodology that HEIs and RIs might use for a more robust approach to benchmarking is the European Innovation Scoreboard 2020 (see Box 5.2) which provides a comparative assessment of research and innovation performance of EU countries against other European countries and their regional neighbours. As noted above, Lithuania is judged to be a Moderate Innovator (on a rising scale starting from Modest Innovator, Moderate Innovator, Strong Innovator to Innovation Leader).

Box 5.2. European Innovation Scoreboard

The European Innovation Scoreboard provides a comparative analysis of innovation performance in EU countries, other European countries and regional neighbours. It assesses relative strengths and weaknesses of national innovation systems and helps countries identify areas they need to address. The European Innovation Scoreboard 2020 was released on 23 June 2020.

The 2020 edition of the Innovation Scoreboard highlights that the EU's innovation performance continues to increase at a steady pace, with growing convergence between EU countries. On average, the innovation performance of the EU has increased by 8.9% since 2012. Performance increased in 24 EU countries since 2012, with the largest increases in Lithuania, Malta, Latvia, Portugal and Greece.

At the global level, the EU's performance has overtaken the United States for the second time, and it continues to perform better than the United States, China, Brazil, Russia, South Africa and India. Since 2012, the gap between the EU's performance and that of South Korea, Australia and Japan has increased, while the EU's performance lead over the United States, China, Brazil, Russia and South Africa has decreased.

Source: EC (2020^[2]), *European Innovation Scoreboard 2020*, European Commission.

HEIs and RIs in Lithuania expressed confidence in their ability to contribute to regional and national development in the Baltic region. Indeed, the Analysis of 2011-2015 external review of HEIs in Lithuania concluded that the scale of impact by HEIs on regional and national development is beyond any doubt and marks a win-win situation. The positive regional and national impact is felt both by institutions of research and academic studies and their social partners. Among many advantages they noted, co-operation with business and academic partners merits special attention for stimulating knowledge development, facilitating qualitative improvement of the curriculum, and contributing to employment and other national priorities. Effective regional and national development activities and publicity contribute to the status and prestige of HEIs, including among potential new students.

In conclusion, the majority of HEIs and RIs described a strategic commitment to becoming more entrepreneurial. Strong evidence emerged of an entrepreneurial approach in the alignment between HEIs and national and organisational priorities and in their many strategic collaborations. However, it was noted that key performance indicators are not used to benchmark the entrepreneurial performance of HEIs and RIs. There are many existing achievements by HEIs and RIs and these would benefit from being located within the national and European contexts. Benchmarking would help to promote current entrepreneurial strengths, to identify institutional comparators, to ensure that any weaknesses are identified, to create effective targets for improvement, strengthen institutional identity and ultimately to enhance the international reputation of Lithuanian higher education and research.

Funding and people

If an HEI or RI is committed to carrying out entrepreneurial activities to achieve its strategic objectives, key resources, both funding and people must be in place to sustain and increase its capacity.

Funding

An entrepreneurial organisation is one that is determined to both maximise and diversify its funding base. For example, HEIs seek to maximise the state funding that they receive, first for teaching, and secondly, for research. However, such funding often only covers fixed costs. This leaves little discretionary monies for accelerating innovative or entrepreneurial development. Organisations thus seek to diversify their funding through third-stream activities, such as working with the public and the private sectors, with industry and philanthropists, and by raising income from intellectual property and campus services. In addition, strategic collaborations can offer access to additional funding, physical and human resources.

HEIs reported a strong motivation and a strategic commitment to raising money from nongovernmental sources, although they noted that this is a highly competitive area and that raising third-stream income from business and industry is not easy. Competition for external funding is considered “tough”, requiring high quality, competitively priced products. Barriers to income generation include an unwillingness on the part of companies to pay for services and a perceived lack of entrepreneurial culture in academia and the wider society.

In discussion, it was noted that targets were crucial if third-stream income was to be increased, by setting up targets that were described as ranging from “comfortable” to “stretching”. Financial targets could be set at the organisational, departmental and individual levels. Ambitious targets are sometimes used to stimulate competition within an organisation. In HEIs, the financial targets could be varied between academic disciplines on the basis of their inherent income potential. One business school, funding is composed of 40% government funding and 60% external funding.

HEIs reported a wide range of activities they use to raise money, including the sale of products and services, providing consulting and training, and supplying access to specialised equipment and facilities. Vilnius Gediminas Technical University offers services for business that combine creativity and expertise

to solve relevant problems. They might, for example, evaluate a product or technology from a business point of view; create prototypes using the latest technological solutions; create advertising for products; or analyse the possibilities for commercialisation.

Strategic partnerships with prestigious companies can ensure continuity and sustainability of funding. The National Innovation and Entrepreneurship Centre (NIEC) at KTU is a link between science and business, ensuring smooth mutual co-operation, commercialisation of the latest innovations developed at the university, protection of intellectual property and developing newly established enterprises. The Design Innovation Centre of Vilnius Academy of Arts is a centre of excellence that was established in 2007 to promote design in society, which generates income by providing commercialisation, development and renewal of new products and incubation activities.

Companies are sometimes willing to invest in infrastructure, for example, new laboratories. As an example, the Lithuanian AI Laboratory opened its doors in 2020 at the Institute of Data Science and Digital Technologies of the Faculty of Mathematics and Informatics of Vilnius University. It is a result of co-operation between Vilnius University and a Lithuanian biometrics company, Neurotechnology. The AI Laboratory aims at fostering the practical application of knowledge by solving scientific and technological problems related to artificial intelligence, machine learning, automatisisation and robotics. In Lithuania, few companies can afford a R&D department. The creation of this laboratory is seen as a win both for business and for academia.

Philanthropy is not yet well established in Lithuania as a source of additional income for HEIs. The Vilnius University Foundation is the first university endowment in Lithuania. In 2016, three investors established an endowment capital fund, and the return from investment is used to ensure university's financial stability, finance studies, internships, establish scholarships and mobility grants for the most talented students and scholars at home and abroad.

People

An entrepreneurial organisation seeks to create maximum value by involving and empowering each employee to use their expertise and knowledge. The level of innovation in an organisation is influenced by the diversity of people and the degree of their inclusion in creative activities and decision-making processes. Issues of diversity (age, gender, race, etc.) and equal opportunity are important factors in increasing organisational capacity. HEIs discussed the diversity of their staff in terms of gender, age and nationality, and in relation to academic subject disciplines, research and management positions.

The percentage of women academics in Lithuanian HEIs is one of the highest in OECD countries, but this is not true of all academic disciplines. Students noted, for example, the absence of women professors in physics. This lack of diversity can have an impact in many ways, for example on student support, supervision of study trips and in a lack of career role models. The percentage of female university professors of the total number of professors was 35% in 2015 and 40% in 2019.

Efforts to establish diversity depend on demographic trends. In 2019, more than one-fifth of the EU-27 population was aged 65 and over. The percentage of people of 80 years or older in the EU-27's population is projected to increase by a factor of 2.5 between 2019 and 2100, from 5.8% to 14.6%. The increase in the percentage of the population of age 65 years or over between 2009 and 2019 in Lithuania was 2.6%, compared to the EU average of 2.9%.

Interviews suggest that it was seen as important for the long-term sustainability of HE and research to be able to recruit younger, international staff and people from industry. The percentage of persons awarded master's degrees in Lithuania is almost half the OECD average, and the share of researchers in the total number of employed persons is by 27% lower than the EU average. The number of doctoral graduates in Lithuania is half the OECD average.

Equal opportunities are relevant to every aspect of the operation of HEIs, including the recruitment and progress of students and staff. Student admissions in 2019 included 1.4 times fewer men than women among university entrants. Those with a basic disability enter HEIs less frequently than those who do not have special needs. In discussion, students noted that in their opinion, students were treated fairly by their HEIs. In terms of career progression for staff, as in other OECD countries, fewer women occupy senior positions in Lithuania. In discussion, it was noted that staff who concentrate on teaching are at a disadvantage, since promotion is based on research rather than teaching. Wage analysis by groups of positions and by gender shows that in many positions, women receive lower wages than men.

Discussions revealed how well-versed the organisations were in the debate around these issues of diversity and equal opportunity, including whether strategies or policies existed or were under development, the monitoring of key performance indicators, and the drivers for developments in these issues, including demographic trends. One HEI reported that this was a relatively new discussion which tended to occur more at the level of top management. Another HEI shared the view that although these issues were fully embedded in some disciplines, e.g. in health and nursing education, it is hard to connect these issues to all academic disciplines and that they are rarely discussed.

HEIs and RIs acknowledged the need to develop strategies, policies and plans, not least because European funding streams has recognised the importance of improving gender equality in research and innovation, and to overcome persistent gender gaps. As a result, gender equity plans will gradually become part of the eligibility criteria for public bodies, research organisations and HEIs applying to the programme. Discussions of gender equality policies and plans in Lithuanian HE and research revealed that some organisations are only in the early stages of incorporating equal opportunities into their organisational strategy and devising key performance indicators, while others are much further along. Important questions to investigate include how diversity data is gathered, how equal opportunities are monitored, who is conducting the monitoring, what actions are taken as a result and whether these actions lead to improvements. It is preferable if organisational procedures can detect and correct problems. It is unsatisfactory if a lack of equitable opportunity goes unnoticed and if those who are subject to discrimination are unable or prevented from getting the support they need.

KTK supplied an example of an annual report where a variety of statistics are analysed, including the gender balance. This included analysis of all workers, the distribution of college lecturers' positions by study programs, the qualifications of lecturers, the number of lecturers from universities and other research institutions and business enterprises invited to the college, the number of lecturers from foreign countries, the distribution of teachers by age, the number of staff participating in professional development, the number of staff participating in Erasmus+ projects, and the strengths and aspects to be improved.

Vilnius University is one of eleven partners from nine European countries in the Supporting and Implementing Plans for gender Equality in Academia and Research (SPEAR) consortium, funded by the European Union's Horizon 2020 Science with and for Society programme. SPEAR focuses on supporting the implementation of Gender Equality Plans in European universities in accordance with the European Institute for Gender Equality's GEAR tool which provides universities and research organisations with practical advice and tools through all stages of institutional change, from setting up a gender equality plan to evaluating its real impact.

At Kaunas Technical University approved an Equality and Diversity Policy to ensure the implementation of the fundamental human rights set out in the Constitution of the Republic of Lithuania and the Charter of Fundamental Rights of the European Union. The university has also set up an Equality Committee. The Council of Marine Research Institute at Klaipėda University has confirmed a Gender Equality Action Plan for the period 2018-2023. The Lithuanian Research Centre for Agriculture and Forestry has discussed diversity and equality in relation to six long-term research programmes, and these issues were also raised with the Ministry.

In summary, HEIs and RIs reported that they are committed to using the key resources, such as funding and people, that are needed to sustain and grow capacity. Many examples were cited of efforts to diversify income through third-stream activities. Diversity and equal opportunities are also important in increasing organisational capacity, and some organisations are developing equal opportunity strategies and using key performance indicators to evaluate and improve performance. Diversity and equal opportunity are a useful means of increasing organisational capacity and the long-term sustainability of HE and research.

Incentives, efficiency, productivity and value for money

Incentives

If an HEI or RI is committed to carrying out entrepreneurial activities to support its strategic objectives, incentive systems need to be in place to sustain and increase its capacity for entrepreneurship. In discussion, all HEIs and RIs confirmed that they use incentives to motivate and reward their workforces.

Staff can receive additional supplements to their salaries if they meet or exceed agreed performance targets. Klaipėda University has introduced a new salary system, approved by its council, with a base salary and the chance to earn extra for contributions to innovation and start-ups. RIs reported that staff who worked harder and generated more research output were rewarded with additional salary.

HEIs and RIs reported that they have procedures in place for the allocation of duties and responsibilities to staff members. Kaunas Technical University publishes Guidelines for Organisation of Performance Evaluation and Competitions for the Positions of Lecturers and Researchers. All HEIs confirmed that they share a common approach in which the teaching staff's work responsibilities are allocated to teaching and research, and the balance of those activities for each year is agreed upon in advance with their academic manager. Minimum targets for research output are commonly used when agreeing on work outputs and workloads. Where appropriate, allocating hours to other duties, e.g. professional practice, creative activities and external liaison, is also accounted for.

In discussion, it was noted that the management of workloads is the responsibility of the individuals and their immediate manager. There is no central oversight of workloads or mechanisms for avoiding extremes of low or high workloads. Some students noted that academics are obliged to work long hours in order to fulfil a broad range of responsibilities and that higher workloads can deprive academic staff of time for reflection, creativity and entrepreneurship. HEIs reported that staff experience high workloads and noted that academics can become demotivated if their workloads remain too high for too long.

HEIs also use awards to incentivise staff. KTK makes awards to staff in both the study and the research departments, and these are announced and celebrated during the graduation ceremonies. The LSMU holds a competition to identify the most innovative lecturer, who receives a financial award.

Incentives are sometimes funded from additional third-stream income. This may be modest compared to government funds, can enable an organisation to provide monetary and non-financial incentives. In discussion, HEIs reported that they used the income raised from nongovernmental sources in a variety of ways, including for overheads for central services (writing contracts, meetings, etc.), to support faculties (both infrastructure and people) and to reward academics (in salary, and in time for study and research).

Efficiency, productivity and value for money

Additional resources gained from third-stream income sources enables additional output. The corollary is that if the additional resources are not available, then it is not possible to produce, or perhaps even attempt to produce, the additional outputs. A more entrepreneurial approach would be to consider questions of efficiency (the ability to accomplish something with the least amount of wasted time, money and effort), productivity (maximising the value created from the available resources) and value for money (cost

minimisation, output maximisation and full achievement of the intended results.) These are important issues, given the limited amount of public funding available, the inevitable rise in costs year-on-year and the increasing expectations that a variety of stakeholders have in the quality and impact of HE and research.

Efficiency, productivity and value for money are complex issues in the context of HE and research. They are difficult to measure, and their meaning and purpose are a matter of debate. In discussion, HEIs and RIs reported that measuring productivity is seen as difficult and hard to evaluate. For example, HEIs reported tensions between demanding teaching workloads and the requirement to generate high-quality research papers. No methodology is currently used, however, to monitor or attempt to increase productivity. Productivity was described as simply “trying to deliver as much as we can.”

The distribution of duties between academics, researchers and administrators is an important issue. According to the Review of the State of Higher Education in Lithuania, administrative staff members are three times more numerous than academic staff. The growing need for monitoring and accountability is driving up the number of staff performing these functions. The use of new technology is also an important consideration. At Klaipėda University, administration of internal and government funded projects has been managed entirely online since 2020, saving time, generating management information and reducing paperwork. Such systems need to be aligned with the procedures and systems used by the HEIs and RIs to report to the Ministry, to avoid duplication of effort and reduced productivity.

In conclusion, in both HE and research, as organisations strive to become more entrepreneurial, it becomes necessary to address issues of efficiency, productivity and value for money. This inevitably requires major changes to traditional and current ways of working and will require concerted effort to achieve the necessary organisational transformation. The approach must be realistic, recognising problems, obstacles and bottlenecks. It must overcome any inability or unwillingness to question the status quo or to embrace change. Organisation-wide action plans will be needed to improve the capacity of entrepreneurship and innovation at every level of an organisation.

Staff development and organisational transformation

If an organisation is committed to greater innovation, and to taking a more entrepreneurial approach to its core activities, it will need a commitment to ongoing staff development and organisational transformation. In discussion, HEIs and RIs reiterated their commitment to encouraging an entrepreneurial attitudes and behaviours of staff and students, to achieve this organisational change.

Staff development

The objectives of staff development include strengthening capacity, enhancing the ability to deliver strategic objectives, establishing and embedding good working practices and ensuring that people have the necessary expertise and knowledge to make the best use of the resources available in an efficient, productive manner.

Staff development can help develop a set of shared understandings of the attributes that all staff should develop and help staff to see how their day-to-day responsibilities influence the organisation’s strategy and entrepreneurial goals. HEIs reported that they “treasure people” and that their culture encourages people to grow personally and professionally. Organisations make a variety of development opportunities available to staff, including specialised seminars, congresses and conferences, workshops and financial support for doctoral study. Responsibility for developing staff competencies is often the responsibility of deans in the faculties rather than of a central human resources department. Typically, a personnel department manages the formal procedures associated with the recruitment and employment of staff.

In discussion, it was noted that RIs place less emphasis on personal development and place greater focus on the quality of the science. At KTK, the professional development of college teachers is encouraged by in-house courses for staff to improve their qualifications, including studying for doctoral and master's degrees. External seminars, conferences and projects at national and international levels provide opportunities for development. Erasmus+ projects allow teachers and staff of the college to go on short-term teaching or study visits. Finally, opportunities to enhance the knowledge and expertise related to business and industry arise in consulting and training activities with practitioners and enterprises.

Staff development needs and opportunities are identified and agreed during an annual meeting to review performance and plan future work responsibilities. One HEI noted that discussion of innovation and entrepreneurship could be “embarrassing” in an annual review, since academics are considered conservative in their outlook. Another HEI noted that although informal discussions of topics such as the entrepreneurial mindset did occur, such considerations have not been made a formal part of annual performance reviews. One RI shared the view that researchers should not be forced to become more entrepreneurial. Doubts were expressed as to whether every discipline, all staff or all organisations had the ability to become more entrepreneurial, or even if this was desirable.

Intrapreneurship is the idea that organisational capacity can be increased by encouraging employees to develop their attitudes and behaviour, so that they think and act more like entrepreneurs. This applies not simply in the pursuit of entrepreneurial activity, such as the commercialisation of research, but by using entrepreneurial behaviour as appropriate, such as risk-taking and creativity, in all their duties and responsibilities.

In discussion, it was clear that little consideration is given to intrapreneurship, or the rigorous identification of the desirable characteristics of entrepreneurial employees or of the value of increasing productivity to release more human resource potential for HE and research. In an example of a more forward-looking approach, the European Institute of Innovation and Technology (EIT) health hub at LSMU organises innovative staff development activities for academics and administrators, including hackathons and pitch competitions.

Organisational transformation

In discussion, HEIs and Research Institute confirmed that they have a strategic commitment to changing their organisations to become more entrepreneurial. However, they also recognise that this change will mean engaging in an “entrepreneurial journey” over the medium to long term. Some organisations are already introducing new entrepreneurial activities, e.g. entrepreneurship qualifications for students, entrepreneurship topics for research or collaborations with industry. The longer-term goal is the establishment of an entrepreneurial culture that builds new relationships and synergies, which infuses every part of an organisation and all its activities. Creating such a culture will require organisational transformation that continuously builds capacity for innovation and entrepreneurship.

The need to improve the innovation capacity for HEIs is a key objective for the EIT as part of its new strategy, the EIT Strategic Innovation Agenda (SIA) 2021-2027. The initiative aims to support HEIs to develop innovation action plans (see Box 5.3) and recognises the need for organisational change. The Pilot Call for Proposals invites European HEIs to design institutional action plans to enhance their entrepreneurial and innovation capacity at all institutional levels.

Box 5.3. Innovation capacity building for higher education

The HEI Initiative: Innovation Capacity Building for Higher Education is a key objective for the EIT as part of its new strategy, the EIT Strategic Innovation Agenda 2021-2027. The initiative aims to support HEIs with expertise and coaching, access to the EIT innovation ecosystem and funding, enabling them to develop innovation action plans complementing the needs of individual HEIs. The initiative will help HEIs across Europe enhance their ability to innovate. More specifically, the initiative aims to encourage these institutions to look at their own practices and develop concrete actions to increase the impact of their innovation and entrepreneurship activities on their local and regional ecosystems.

What type of activities will the Initiative support? Activities to support HEIs can focus on several themes, including:

- encouraging institutional engagement and change
- strengthening partnerships between higher education, business and research organisations
- developing innovation and business support services
- enhancing the quality of entrepreneurial education
- creating and disseminating knowledge.

Source: EIT (n.d.^[3]), *Opportunities*, <https://eit.europa.eu/our-activities/opportunities/pilot-call-hei-initiative-innovation-capacity-building-higher-education>; EIT (2021^[4]), *Pilot Call 2021: Factsheet*, <https://eit-hei.eu/assets/pdf/hei-factsheet.pdf>.

Transformation and cultural change in any organisation are challenging, and HE is no exception. However, a substantial body of literature and case studies offer guidance as to what works and what does not. For example, an entrepreneurial culture can be encouraged (see Box 5.4) if an organisation identifies common entrepreneurial attributes for its staff and makes explicit the connections between its entrepreneurial strategy and their day-to-day roles and responsibilities.

Box 5.4. Supporting institutional transformation for an entrepreneurial culture

In developing an entrepreneurial culture, it could be beneficial for a university to:

1. make a strategic commitment to developing a unified culture with the objective of supporting stakeholder engagement including interactions between the university and industry
2. create, through wide-ranging discussions, a set of shared understandings of the common attributes that all staff might develop and which would provide a foundation to support university interactions with external organisations, including industry
3. connect entrepreneurial strategy to the day-to-day roles of staff and define the corresponding expectations for leadership and management
4. use human resources policies to devise a system of pay, rewards, recognition and incentives that will motivate staff to become more entrepreneurial
5. provide development activities for senior staff so that they can become entrepreneurial leaders capable of building an entrepreneurial culture.

To overcome the obstacles reported in moving a university toward an entrepreneurial mode, leaders must demonstrate the tangible benefits of an entrepreneurial strategy in enhancing an institution's reputation and building a sense of pride in staff, students and business partners. They need to become role models of entrepreneurial leadership and ensure that the entrepreneurial strategy is an embedded priority for all.

Source: Coyle, P. (2014^[6]), "How Entrepreneurial Leadership Can Engage University Staff in the Development of an Entrepreneurial Culture", <http://dx.doi.org/10.5367/ihe.2014.0215>.

In conclusion, HEIs and RIs can be guided in their pursuit of organisational transformation by using research literature, case studies, the output of new initiatives, such as the EIT Innovation Capacity Building and by learning from other exemplary organisations. In discussion, the examples of Aalto University in Finland and Eindhoven University of Technology in the Netherlands were both cited as useful case studies. A note of caution is necessary, however, since translating good practice from one context to another is fraught with difficulty. Each organisation will need to devise its own approach to its "entrepreneurial journey" and define what entrepreneurship means in relation to its own history, location, resources and future strategy. Finding the right terminology in the Lithuanian language is also crucial.

Recommendations

Considerations for policy makers

The majority of HEIs and RIs described a strategic commitment to becoming more entrepreneurial over time. HEIs and RIs see themselves as playing a role in the so-called "triple helix" of government, education and industry as they work to create economic, social and cultural value in Lithuanian society. Strong evidence of an entrepreneurial approach is indicated by the alignment of national and organisational priorities and in the many strategic collaborations involving Lithuanian partners. However, a lack of key performance indicators to benchmark the entrepreneurial performance of HEIs and RIs was noted. Policy makers should work with organisations in Lithuania and Europe to establish a set of key performance indicators that would allow for a robust approach to benchmarking. This could help promote current entrepreneurial strengths, identify institutional comparators, ensure that any weaknesses are identified, create effective targets for improvement, strengthen institutional identity and ultimately enhance the international reputation of Lithuanian higher education and research.

Considerations for institutions

HEIs and RIs should continue to use key resources, both funding and people, to sustain and grow capacity. They should maintain their efforts to diversify income through third-stream activities. At the same time, institutions should increase their efforts to promote the benefits of diversity and equal opportunity as a means of increasing organisational capacity and securing the long-term sustainability of HE and research. All institutions should strengthen their equal opportunities strategies, the associated action plans and the use of key performance indicators to evaluate and improve performance.

If institutions are to achieve their stated aim of becoming more entrepreneurial, they should do more to address issues of efficiency, productivity and value for money. This will inevitably require major changes to traditional and current ways of working. Institutions should ensure that their organisation-wide action plans can deliver improvements in the capacity for entrepreneurship and innovation. Institutions should ensure that their approach is determined and realistic, fully recognising the inevitable problems, obstacles and bottlenecks that will have to be overcome.

HEIs and RIs should strengthen their capacity for organisational transformation by making use of research literature, case studies, the outputs of new initiatives like the EIT Innovation Capacity Building and by learning from other exemplary organisations. However, a note of caution is necessary, since the translation of good practice from one context to another is far from obvious. Each organisation will need to devise its own approach to its “entrepreneurial journey” and define what entrepreneurship means in relation to its own history, location, resources and future strategy. Finding the right terminology in the Lithuanian language is also crucial. It will be necessary to design institution-wide action plans to address the scope of the ambitions for building an entrepreneurial culture and the challenges of transformation.

References

- Coyle, P. (2014), “How entrepreneurial leadership can engage university staff in the development of an entrepreneurial culture”, *Industry and Higher Education*, Vol. 28/4, <http://dx.doi.org/10.5367/ihe.2014.0215>. [5]
- EC (2020), *European Innovation Scoreboard 2020*, European Commission. [2]
- EIT (2021), *Pilot Call 2021: Factsheet*, European Institute of Innovation and Technology, <https://eit-hei.eu/assets/pdf/hei-factsheet.pdf>. [4]
- EIT (n.d.), *Opportunities*, European Institute of Innovation and Technology, <https://eit.europa.eu/our-activities/opportunities/pilot-call-hei-initiative-innovation-capacity-buildinghigher-education>. [3]
- HEInnovate (n.d.), *Home Page*, EC/OECD, <https://heinnovate.eu>. [1]