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# The role of HEInnovate for change Processes in higher education institutions

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## 1. Introduction

To date, there is only very little research about the impact of using of the HEInnovate self-assessment tool (AbouElenain 2019). Thus, there is no extensive evidence that shows the usefulness of the tool and how and to what extent it supports transformation processes in higher education institutions. The user stories on the HEInnovate platform showcase transformation processes in which the tool was applied. These stories focus on the actual process and the actions taken but do not analyse the specific role of the HEInnovate tool, workshop and the further HEInnovate resources in the transformational process. Also AbouElenain (2019, p. 17) states that there is hardly any research or evidence on the use of the HEInnovate tool. AbouElenain (2019) who studied the use of the HEInnovate tool at a number of Austrian higher education institution was also not able to identify the value that using the HEInnovate tool had for the institutions. Instead, the study finds that the perceived value of the tool correlates with the level of engagement of the process leaders which actually does not clarify to what extent the institution benefitted from conducting a self-assessment. Ruskovaara and Pihkala (n.d.) mention as an assumed added value of the use of the HEInnovate tool is that it provides users with the opportunity to learn and discuss a variety of entrepreneurship aspects. Also, the tool allows to measure how entrepreneurship has developed when following-up interventions. It must be noted that these are primarily theoretical assumptions. There has been no large-scale research on how multifaceted the discussions were when using the HEInnovate tool (compared to discussions where the tool was not used). Furthermore, there is no data on whether and to what extent HEIs use the tool to measure their entrepreneurship development.

However, there is some anecdotal evidence that the using the HEInnovate tool and platform does not have a strong impact on the course of transformation process in higher education institutions. In particular, the translation of the self-assessment results into an action plan appears to be a crucial threshold in the process. AbouElenain's study of the implementation of the self-assessment in Austrian higher education institutions unfortunately did not cover the phases after the actual assessment, but concentrated on the process towards it. HEInnovate was hardly used after the first self-assessment. It also did not play a role for following up change processes or measuring the progress in integrating entrepreneurship in the higher education institution.

This problem, i.e. the only limited use of HEInnovate is a central concern in the BeyondScale project. BeyondScale is one of four Forward-Looking Projects funded by the Erasmus + - Scheme that engages in enhancing the use and usefulness of the HEInnovate tool. One major goal of the project is to develop the HEInnovate approach further, i.e. on the one hand to develop tools supporting the use of the tool in a research-based manner and to conclude suggestions for an enhanced use of the tool. In the following, insights from the accompanying research on how to enhance the use and usefulness of the HEInnovate tool will be presented.

## 2. Making use of HEInnovate

### 2.1 The HEInnovate tool and methodology

The HEInnovate tool and its resources (see: <https://heinnovate.eu/>) are supporting HEIs in their efforts to encourage entrepreneurship and innovation. A key element of HEInnovate is the self-assessment tool, that helps HEIs identifying their strengths and weakness with respect to the attention given to entrepreneurship and innovation throughout their institution. This self-assessment tool is primarily designed to initiate discussion processes in HEIs and to bring different stakeholder groups together in discussing institutional change and transformation towards entrepreneurship.

HEInnovate comprises a set of resources that aim to support this transformation. Currently, the HEInnovate website provides the HEInnovate self-assessment tool, a database with case studies of HEIs that have been changing towards more entrepreneurship and a rich set of training materials and country reports to guide the practitioners, managers, instructors, and policy-makers when using the HEInnovate platform in transformation processes.

Some tools that were recently added to the platform are EPIC and Entertime. EPIC provides support for measuring the impact, respectively the learning outcomes, of entrepreneurial teaching and learning in students.<sup>1</sup> Entertime is a platform for higher education teachers who wish to enhance their entrepreneurial teaching skills.<sup>2</sup>

HEInnovate is a joint initiative of the European Commission and the OECD, who have been funding the tool and its implementation and roll-out. However, HEInnovate is also a bottom-up initiative: A pan-European HEInnovate Expert Group helps shape the content of the HEInnovate self-assessment tool. Since its implementation in 2013, the HEInnovate self-assessment tool has continuously been adapted and enhanced to better serve the needs of HEIs. Since then, the tool was regularly revised, based on the feedback from the HEInnovate expert group. It was gradually adapted to the needs of HEIs and the latest developments in the higher education sector.

As has become apparent in the BeyondScale project<sup>3</sup>, the HEInnovate tool can be extended to even better accompany change processes. For instance, a discussion on the self-assessment statements can be accompanied with a list of supplementary questions for discussion and at different points during the change processes. Another addition is the Value Proposition Canvas, that can help structure discussions on entrepreneurial change between the HEI and its stakeholders.

Before we go into detail about the use of HEInnovate in entrepreneurial change processes, we first present a few background facts about HEInnovate and its origins. After that, the value proposition canvas is presented, and its use in the HEIs' projects to become more entrepreneurial.

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<sup>1</sup> EPIC = The Entrepreneurial Potential and Innovation Competences. See: [https://heinnovate.eu/sites/default/files/EPIC\\_user\\_guide.pdf](https://heinnovate.eu/sites/default/files/EPIC_user_guide.pdf)

<sup>2</sup> See: <https://heinnovate.eu/en/related-projects/entertime>

<sup>3</sup> See: <https://www.beyondscale.eu/>

## 2.2 The self assessment statements and dimensions

The HEInnovate tool currently includes 40 self-assessment statements on eight different topics/ dimensions. The current dimensions are shown in Figure 1. The number of dimensions and, therefore, also the number of statements has steadily increased in recent years. Most recently, a new dimension was added: "Digital Transformation and Capability", which was fundamentally revised again in 2021.

The self-assessment statements cover various aspects of entrepreneurial HEIs and their capacities and skills in this area. This includes the managerial or governance structures, their services and capacities in their three essential missions of research, education and knowledge transfer.

Each of the eight dimensions includes five statements for users to evaluate their HEI with regard to its efforts and achievements in the field of entrepreneurship. Users can do so for each statement and award a score of 1 to 5 (or NA/non-available/applicable if they cannot or do not wish to give an answer). Higher scores indicate a better performance of the HEI in the specific dimension. However, the exact meaning of a particular score is left to the users to define. There is no exact explanation of a score – there is no benchmark against which users can compare their institution's performance.

Users can use the self-assessment tool in a variety of ways: as part of an individual assessment - i.e. the assessment is only carried out by one person, or as part of a group assessment, in which internal and external stakeholders assess their HEI. The HEInnovate tool offers the option of selecting dimensions for the self-assessment, i.e. not all statements have to be used. Elsewhere (see other guidance notes on the BeyondScale website) we have made the recommendation to focus on a limited number of dimensions (or only one of them) in order to prevent making the change process from becoming too wide-ranging and too difficult to manage.

**Figure 1: The HEInnovate resources: dimensions** (see: [www.heinnovate.eu](http://www.heinnovate.eu))



The next figure 2 shows what the HEInnovate platform can bring to institutions, managers and policy-makers in higher education.

**Figure 2: HEInnovate: What does it do?**



HEInnovate essentially aims to kick-off transformation processes that are informed by a self-assessment of the institution's performance. For this, the self-assessment tool provides a list of statements that cover eight dimensions representing the various characteristics of entrepreneurial higher education institutions. Currently, the self-assessment tool lists 42 statements across the eight dimensions shown above. The text box below lists the statements for the HEInnovate dimension "Entrepreneurial teaching and learning".

The self-assessment serves as a strength and weakness analyses. As a result, the assessment should reveal whether the listed aspects are perceived as strengths or weaknesses of the HEI. Ideally, discussing the evaluation results, in particular diverging evaluations across different stakeholder groups, should help identifying appropriate actions that will effectuate the institutional change.

Conducting the self-assessment is relatively easy: Users have to evaluate to what extent they think that the different aspects described in the statement are present in their HEI – and they do so on a five-point scale. When conducting the evaluation, users can use a web-based tool that is included in the HEInnovate platform. For each dimension the tool then generates an average score based on the scores of the individual users. These average scores are then presented in a summative overview that shows the stronger and weaker dimensions in the institution's performance. Based on their evaluation results, users are then provided with a number of institutional case studies and further resources. These resources offer examples and experiences of HEIs that – to some extent – had a similar profile and found their way in implementing changes towards becoming more entrepreneurial.

The tool can be adapted to the needs of the users in many ways: e.g., with regard to the number of evaluators (individual or group ratings), or the selection of statements to be used in the assessment.

**Text box: Entrepreneurial teaching and learning in the HEInnovate self-assessment tool**

*Entrepreneurial teaching and learning involves exploring innovative teaching methods and finding ways to stimulate entrepreneurial mindsets. It is not just learning about entrepreneurship, it is also about being exposed to entrepreneurial experiences and acquiring the skills and competences for developing entrepreneurial mindsets.*

**Statements** (to be scored on a five-point scale):

1. The HEI provides diverse formal learning opportunities to develop entrepreneurial mindsets and skills.
2. The HEI provides diverse informal learning opportunities and experiences to stimulate the development of entrepreneurial mindsets and skills.
3. The HEI validates entrepreneurial learning outcomes which drives the design and execution of the entrepreneurial curriculum.
4. The HEI co-designs and delivers the curriculum with external stakeholders.
5. Results of entrepreneurship research are integrated into the entrepreneurial education offer.

Ideally, the self-assessment is carried out by internal and external stakeholders of the HEIs in an interactive workshop format. The different workshops are shown in Figure 3, below. For those HEIs that plan to have a more interactive format to evaluate their performance, the HEInnovate platform suggests three different workshops.

The first workshop serves as an introduction to the HEInnovate tool for novice HEInnovate users. The second and third workshop aim to support transformation processes in HEIs, allowing discussion among the stakeholders about their perceptions of the entrepreneurial potential of the HEI and its strengths and weaknesses in that respect. The second workshop is primarily about starting up the transformation process, identifying areas for improvement. These actions are the taken up in an institutional change project. The third workshop would be at (or near) the end of the project, to look back at what has been achieved and to assess progress. It can also be used to discuss potential follow-up actions.

**Figure 3: The HEInnovate Process**



### 3. The Value Proposition canvas as enhancement for the use of HEInnovate

To enrich the use of the HEInnovate self-assessment, HEIs can add their own elements to the set of tools and workshops suggested on the HEInnovate platform. One of these additions is the value proposition workshop. Such a workshop was tested as part of the BeyondScale project and the partners in that project reported positive experiences with this addition.

The idea of the value proposition originates from the business world. The Value Proposition Canvas was initially developed by Alexander Osterwalder as a framework to ensure that there is a fit between a product and the needs of the market (Osterwalder et al., 2015). A value proposition describes the benefits customers can expect from the products and services on offer. It gives the reason why a customer should buy a product or service from that particular business. The value proposition is the basis of the business model of a firm.

Providers of a service will need to understand their market and the needs of their customers. The same is relevant for higher education institutions (HEIs). HEIs also are interested in a match between the students' profile and the values offered by their education and research services/ outputs. The understanding of 'value' will differ between the different 'customers' – say, stakeholders – of a HEI. Value can not only be expressed in a monetary sense. There is also a signalling value attached to education – for instance expressing the skills or competencies of students / graduates or the a prestige (or reputation) value. In addition, the services offered by HEIs have a social – a *public* – value that goes beyond the private value for the individual student receiving an education (or a degree). These different types of values are not equally important to all stakeholders.

A Value Proposition Canvas (VPC) is a way to structure the different elements that feed into the value proposition. The canvas can be visualised (see Figure 4, below) and in group settings it is often



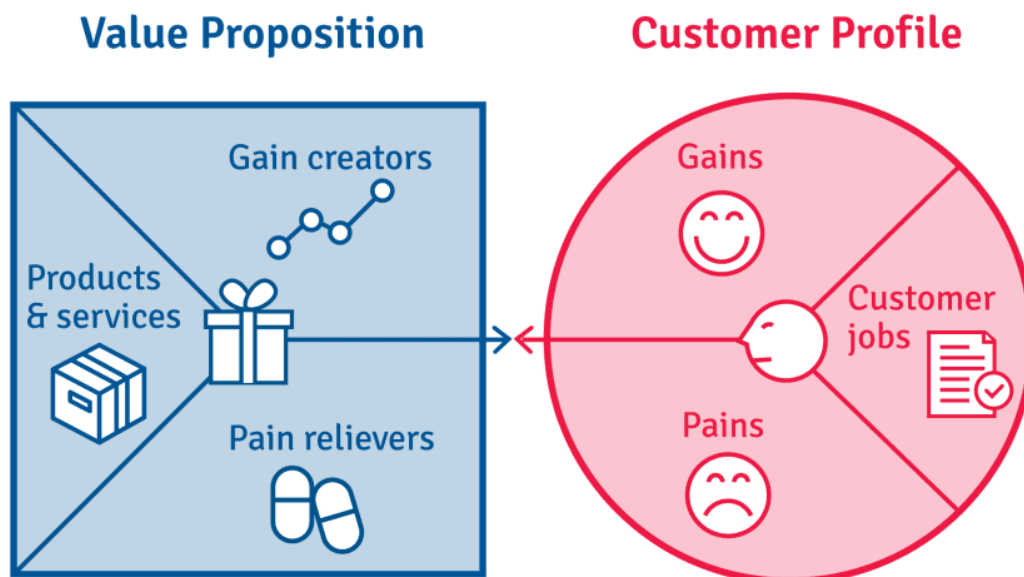
used as a means to structure a discussion around business ideas. The canvas has two segments: the 'Customer Needs' and the 'Value Proposition'. In total it comprises of six elements:

- Customer jobs
- Pains
- Gains
- Products & services
- Pain relievers
- Gain creators

The canvas can be used by a HEI to identify the needs and demands of its stakeholders (both its internal and external stakeholders) and the way the HEI can address those needs. This exercise normally is initiated by one of the departments of a HEI, with a number of academics and professionals taking the lead. In the discussions around the HEI's value proposition also the HEI's clients – its internal and/or external stakeholders – can be included. Involving them would be in line with the idea that the HEI, together with its customers, is interested in *co-creating* the value(s) – the *gains* – that its customers are looking for (see also Äyväre and Jyrämä, 2017).

The function of the canvas is to structure discussions between a provider of goods and services – in our case: a HEI – and its customers (its stakeholders, e.g. its students), and to stimulate learning about the stakeholder needs. The tool helps develop the HEI's value proposition to the stakeholders.

**Figure 4: The Value Proposition Canvas**



Source: <https://www.b2binternational.com/research/methods/faq/what-is-the-value-proposition-canvas/>

The Value Proposition Canvas (VPC) structures the workshop discussion along the elements defined in the canvas. Workshops using the VPC thus sequentially discuss the elements ‘Jobs’, ‘Pains’ and ‘Gains’ of the Customers/stakeholders and then the corresponding Value Proposition, including the ‘Products and Services’, ‘Pain Relievers’ and ‘Gain Creators’ of the HEI.

In the literature we only find very few cases in which the VPC was applied to innovate or transform higher education. One example is the curriculum innovation in entrepreneurship education. In this case, a business model canvas was adopted and transformed to a curriculum innovation canvas (Willness and Bruni-Bossio 2017, 146). For instance, the VPC was used to propose the redesign of business models of HEIs in Malaysia to support them in becoming the universities of the future (Dahlan et al. 2020). In that case, students were the focus of the canvas – they were the customers of the HEIs and their future jobs after graduation guided the development of new business models for the Malaysian universities.

## 4. BeyondScale as a testbed for the value proposition canvas

The BeyondScale project has tested the Value Proposition Canvas (VPC) as a tool to help structure the HEInnovate workshops aiming to develop action plans for the HEI (see Figure 3). This section will present some guidelines to assist project managers who wish to make use of a VPC in their organisational change processes.

In the first workshops organised by the HEIs involved in the BeyondScale project, the VPC was used to learn about the demands and expectations of the HEI’s internal and external stakeholders. To this end, the original HEInnovate workshop process shown in Figure 3 was adapted. The process that runs from self-assessment, formulating an action plan, implementing it, and, finally, reflection on achieved results was split in three stages: The preparation stage, the actual workshop stage and finally a reflection stage.

### 4.1 The preparation stage

The project partners in the BeyondScale project at the start of the project had defined two major activity areas to strengthen entrepreneurship in their institution. The first targeted primarily internal stakeholders of the HEI. This was named the “inbound” project. The other activity area addressed external stakeholders – in an “outbound” project. Employing the HEInnovate self-reflection tool was done foremost to support a more detailed planning of the HEI’s actions for achieving the goals. This is where the VPC is helpful, because it explicitly considers the stakeholders’ needs and expectations.

Compared to the HEInnovate workshops described above, the BeyondScale projects all aimed at a more limited area of application of the tool. Rather than assessing the HEI on all of the eight HEInnovate dimensions, the activities undertaken by the BeyondScale partners focused on a specific task or service of the HEI. This was done to keep the change project within bounds and increase its chances of success. Therefore, an important task during the preparation stage is to select those self-assessment statements and dimensions from the HEInnovate tool that can reveal the best insights in the strengths and weaknesses of the HEI’s entrepreneurial performance.

During this preparation phase, the participants in the workshop have to be selected. The BeyondScale experience learned that a major challenge here is to identify those stakeholders who may provide useful insights and are willing to collaborate in the project and to engage in discussions. They will have to be motivated and willing to take a reflective stance and make an informed assessment of the HEI's strengths and weaknesses with respect to entrepreneurship and innovation. When identifying the workshop participants, a challenge is also to achieve a balanced composition of the participants in the workshop in order to avoid some stakeholder groups being over- or underrepresented.

A second major task in the preparation stage is to encourage the workshop participants to share their perception/evaluation of the HEI's performance in the selected HEInnovate dimension. This can be done by means of a pre-workshop questionnaire sent to the participants in the workshop. As part of BeyondScale, the project managers conducted a survey among the participants and analysed their responses to inform and prepare the actual workshop held after the survey.

A first activity in preparing the workshop is to design a questionnaire. For this, the HEInnovate statements can be used and some can be adapted to the needs and particular situation of the HEI. This implies that the HEInnovate tool is augmented with additional questions that can provide a more detailed set of facts and opinions about the stakeholders' (i.e. the survey respondents') views. An example of such additional questions is given in the text box below for the HEInnovate dimension of *Knowledge exchange and collaboration*.

The information gathered by means of the survey can be used as an input for the workshop, to show the participants to what extent their assessments of the HEI and its entrepreneurship efforts differ. Also, the information should, above all, help the project partners decide on the activities to undertake and how each of the stakeholders understands these activities. As a result the project plan and its intended objectives may be redefined. All this should help the project managers to draft and develop their action plan.

Besides these two main tasks of selecting participants and designing the questionnaire, the project managers will have to organise the workshop in a practical sense, i.e. they have to develop a workshop programme, decide on the format (online, or face-to-face), the moderators (one or two?), and what (digital) tools to use during the workshop discussions (e.g., an online whiteboard such as Mural).

**Text box: Some additional questions for the HEInnovate Dimension ‘Knowledge Exchange and Collaboration’**

Original HEInnovate statement:

1. *The HEI is committed to collaboration and knowledge exchange with industry, the public sector and society.*

**Supplemental questions:**

- What is it best known for in this regard? Please provide up to three examples.
- Where could it improve? Please provide up to three examples.

Original HEInnovate statement:

2. *The HEI demonstrates active involvement in partnerships and relationships with a wide range of stakeholders.*

**Supplemental questions:**

- *From your perspective please provide some positive examples of the above demonstrated by our HEI? (Maximum of three)*
- *Are there areas where the HEI could improve in this regard?*

## 4.2 The VPC workshop

The second step is the actual implementation of the VPC workshop. In the case of BeyondScale, the Covid19 pandemic forced all project partners to conduct online workshops. In more normal times such workshops will be face-to-face events. An online workshop normally will last between one to two hours. While the BeyondScale partners all designed their own workshop programme to meet their needs, all of them used a quite similar sequence of programme elements.

The first issue on the agenda is dedicated to introducing the workshop participants to each other. Then, they learn about the goal of the workshop and are presented with the results of the pre-workshop survey. The latter acts as a stimulus for the discussion among the workshop participants about how the activities and services of the HEI can match better with the demands and expectations of its ‘customers’- its stakeholders. This is where the Value Proposition ideas and the VPC come into play.

The VPC Can be presented to the workshop participants (see figure 4). The canvas helps structure the discussion. The, in the workshop, the canvas can be filled by the participants in a moderated discussion. This is done in an interactive way, based on the contributions of the workshop participants. To this end, some project partners in BeyondScale employed digital platforms such as MIRO. This allowed participants to type in their ideas during the discussion. However, the project managers may decide for themselves how they fill the canvas.

In the workshop, all six elements of the canvas are addressed and populated – either throughout the discussion or separately in a step-by-step way. The BeyondScale experience learned that, in most cases, filling the canvas did not result in a detailed action plan. However, it provided the

project managers in charge of the HEI's inbound and outbound activity with relevant information to further design and develop their planned activity.

In the BeyondScale project, the project partners reflected on their experiences with the value proposition workshops, using the VPC and the HEInnovate tools. They reported on their experience in their *User stories* (see the BeyondScale website [www.beyondscale.eu](http://www.beyondscale.eu) for their user stories).

The value canvas offers a structured approach to workshop activities that involve representatives of HEIs and their internal and external stakeholders. Its goal is to collect information on the various items of the canvas that will feed into a plan for the activities the HEI can undertake to become more entrepreneurial and to engage more with its external stakeholders.

The discussions aided by the canvas are meant to more clearly refine the activities the HEI can implement. These activities include gain creators and pain relievers. Examples of such activities on the side of the HEI (i.e., the left-hand side of the canvas) are shown in the table below.

In the workshop, the stakeholders (i.e., the right-hand side of the canvas) are invited to outline what they expect to achieve through the HEI's project in terms of outcomes and impacts. They will be referring to the opportunities (i.e. gains) they see and the risks (i.e. pains) they perceive.

**Table 1: Business canvas concepts and examples for the higher education field**

<b>Products &amp; Services (Project Activities)</b>	<b>Outcomes for customer (Impact)</b>
Certificates for teachers Entrepreneurship module	Expertise (know how; know why) Transferable skills
<b>Gain creators (inputs; motivators)</b>	<b>Gains (outputs)</b>
Educational support for educators Physical infrastructure/platform	Entrepreneurial mindsets Entrepreneurship embedded in curriculum
<b>Pain relievers (facilitators)</b>	<b>Pains (obstacles)</b>
Subsidies ECTS Credits Compensation (money; time)	Opportunity cost Complexity Lack of knowledge; unfamiliarity

### 4.3 A shared action plan: elements & barriers

In the Value proposition workshop, a process of collaborative planning towards a shared action plan is expected to take place, through two parallel discussions:

1. A joint discussion on the outcomes to be delivered as part of the activity/project. This discussion should include a focus on the gain creators and pain relievers to be put in place by HEI in collaboration with its stakeholder(s);
2. A discussion that results in the development of a broad action plan for the project/activity, i.e. a value proposition between the HEI and its stakeholders, based on gain creators and pain relievers as part of the product/service (the gains) to be provided.

The components of a shared action plan, among others, are:

- The goals of the planned activity
- Expectations of HEI and stakeholders in view of the planned activity addressing pains, gains, etc.
- An agreement on shared goals and collaborations
- A description of actions that will be taken
- A description of collaboration and contributions of collaborators
- Time and resource planning

Change processes may run into problems and obstacles may be encountered along the way. The value proposition workshop, as well as the answers collected from the preparatory questionnaire can be used to identify existing as well as potential challenges and barriers that stand in the way of enhancing the HEI's entrepreneurial capacity. and to collect – bottom-up – exemplary practices and ways to address the entrepreneurial challenges.

Some of these barriers and obstacles are discussed in another guidance note available on the BeyondScale website (i.e. 'A practical guide to entrepreneurial change processes in higher education institutions').

Typical barriers that could impede entrepreneurial change are located in the following areas:

- Institutional culture (i.e. a lack of entrepreneurial culture)
- Diversifying funding (e.g., a lack of resources)
- Stimulating the academic heartland (e.g., a lack of capacity)
- Leadership and institutional management (e.g., a lack of vision and leadership – or management skills)
- Collaborating with stakeholders from an expanded periphery (e.g., a lack of support from stakeholders)

To overcome these barriers, we refer once again to the other guidance notes. In addition, as part of the BeyondScale project, two inspiration fiches were developed. An inspiration fiche is a piece of condensed information about strategies, policies and initiatives undertaken by HEIs to address the entrepreneurship and innovation agenda. A fiche is based on (practical) HEInnovate & BeyondScale experiences and the academic literature on transformation processes in higher education.

As part of an inspiration fiche, a set of interventions (i.e. actions, policies) are suggested to HEIs that wish to tackle a particular challenge (e.g., the HEI engaging more with external stakeholders). Typical barriers, and solutions to overcome them, are also part of the fiche.

Once the action plan has been implemented, at a certain point in time after a substantial part of the project has been carried out, a check can be made to assess the degree to which the project is delivering on its objectives and to establish the extent to which the 'entrepreneurial agenda' has become further embedded in HEIs. For this, the project's lead partners check the project's progress on the basis of further discussions with project participants such as the ones included earlier in the Value proposition workshop. The information that is collected in this phase of the project can be synthesized partly in *indicators*. In another note that is part of the BeyondScale toolbox & website, a list of indicators is presented for measuring the impact of an entrepreneurial change project.

## 5. Conclusions

Based on the experiences of the partners in the BeyondScale project we have drawn up a number of recommendations on how the use and usability of the HEInnovate tool can be enhanced. However, before going into the lessons learned we have to reaffirm the opinion of the BeyondScale project partners that, as a self-reflection tool, HEInnovate is already **a very useful instrument** to support HEIs in identifying their strengths and weaknesses in the area of entrepreneurship and innovation.

The HEInnovate self-assessment statements are often the **start of a discussion** – the start of a *learning journey* – around the experiences and ways in which HEIs can become more entrepreneurial and transform themselves while undertaking this journey.

In order to learn about the ways in which this transformation can take place, the users of the HEInnovate tool can get inspiration from the rich database of case studies and user experiences that is made available through the HEInnovate website. However, the experiences of BeyondScale partners in making use of these HEInnovate resources (i.e. the self-assessment statements, the case studies) suggested that a number of **additions and enhancements to the tool** can be made. We will now present these in the form of a number of challenges. For each of the challenges we will present a way of addressing it, based on the experiences in the BeyondScale project. In other words, BeyondScale can be seen as a *testbed* for finding ways of improving the HEInnovate tool.

### 5.1 Challenge 1: Translate awareness into action

One of the biggest lessons learned during the BeyondScale project is that HEIs often find it challenging to choose the actions to undertake when they wish to move from the current state they are in towards becoming a more entrepreneurial institution. The HEIs that have done a self assessment realize that there are many actions that might be considered and that there are many examples of HEIs in the world that in one or another have managed to implement some of them. However, as shown from our literature review on the topic of Introducing Entrepreneurial Teaching & Learning in HEIs, there are several interventions, actions and strategies to consider and choosing the one that works for the institution is a great challenge.

Addressing this challenge is not a simple task, as each HEI in a way is unique, in the sense of being situated in a particular context and already having some experience in terms of embedding entrepreneurship in the activities (education, research, engagement) and support structures of the institution. In some parts of their institution the HEI already may have reached a particular level of entrepreneurial characteristics, while other parts (say, faculties, departments) may not. Therefore, a first step is building awareness of the state the institution is in – and for that HEInnovate is a useful instrument.

Starting a discussion in the institution on what steps to undertake could easily lead to a debate where too many options and interventions are suggested. Certainly, when the discussion would start from the full set of (eight) HEInnovate dimensions. To prevent this overload of dimensions and issues to consider, it pays to **select one HEInnovate dimension** (or two at most) and to sometimes



go even further and select a particular course of action to achieve a goal – thus **focussing on one particular set of interventions**.

The BeyondScale partners found the choice for one dimension one of the most important pieces of advice when embarking on their organisational change project (say, their inbound, or outbound activity). This focus can help the stakeholders involved in the transformation process remain motivated and continue participating in the project, as they see a clear road ahead of them and they stay focused on the goals of project. It prevents the organisational change project from drowning in ambitions. A clear focus also makes it easier to align the activities undertaken in the project with the needs and demands of the stakeholders (e.g., the students, or the businesses and other external partners of the HEI).

Getting this clear focus on the HEInnovate dimension to concentrate on and the interventions to consider, however, requires that the institutions first **learn about the demands of their stakeholders**. Another important lesson learned in the BeyondScale project is that it pays off to make an investment in engaging the stakeholders in a focused debate on what they perceive to be the value proposition that the HEI can make in addressing their needs. This debate can be organised by means of a workshop where the value proposition canvas is placed in the centre. The **Value Proposition Canvas** distinguishes the pains perceived by the stakeholders, and it provides a structured debate on the ways these pains can be relieved, the gains that can be provided by the HEIs (i.e. their products and services), along with ways this can be done (by means of the gain creators). The value proposition canvas was well-received by the HEIs in the BeyondScale project – it helped structure the debate with their stakeholders involved in the (inbound and outbound) projects and it served as the start of an action plan, with inputs from the different partners in the project.

The preparation of such a workshop that makes use of the value proposition canvas is crucial. From the BeyondScale experience we learned that it helps to first collect the opinions and experiences of the different stakeholders and participants in the workshop. This can be done using the self-assessment statements provided by HEInnovate. However, the statements are not always easy for users to react to.

Firstly, because the HEInnovate self-reflection statements make use of terminology and concepts that are not always clear to the uninitiated (say, outsider). In particular, representatives from external stakeholder parties (e.g., business, non-profit sector) do not have the required profound prior information on the higher education institution to answer a statement let alone the *time* to invest in finding that information. This can lead to a high level of non-response, unreliable responses, or ‘not applicable’ responses.

Secondly, the statements relate to the HEI as a whole, while the respondent may not have the full picture and only be aware of her/his particular department or unit in the HEI. The statements are seen as too broad and not tailored to the individual institution. Despite of this, the statements are inspiring for the organisers of a value proposition workshop – the statements can be seen as the start of the process of collecting information.

Thirdly, the statements are all in the shape of closed questions (requiring answers on a five-point scale), which is a challenging is there is no real benchmark. Scoring a ‘five’ on a statement would



actually require a comparative case – an ideal case. But that does not always exist, so interpreting a score awarded is difficult.

The BeyondScale partners, therefore, in their preparation for the Value Canvas workshop discussions added their own questions to the HEInnovate questionnaire, often deciding to include more ‘open questions’, where information is sought on actual pains, gains and how (and why!) to address them. In particular, these additional questions were meant to collect information on practices and experiences related to their selected HEInnovate dimension. Often, this more qualitative information was found to be more useful than quantitative scores on a five-point scale given by survey participants. Without inviting the survey participants to articulate wishes, desires, pains, gains, ideas etc., one just gets a snapshot of the institution’s present status (as perceived) and does not garner ideas for future development.

All of this leads to the recommendation that the HEInnovate tool can (and should) be made more flexible and useful for HEIs by means of **adding questions and statements** that are more tailored to the issue at hand and the particular stakeholder groups where information and opinions are to be found. In some cases, statements may also be deleted if they are felt to be less relevant for the issue (e.g., dimension and intervention) at hand. One should understand that the goal of HEInnovate is to start a discussion/dialogue in the HEI to initiate change processes. Whatever makes this goal become more within reach may need to be added to the tool. This also includes **adding clarifications** of terms (e.g. entrepreneurship) and examples to the HEInnovate tool.

## 5.2 Challenge 2: Identifying the relevant resources from the HEInnovate case studies, user stories and guidance notes

The BeyondScale partners often found it challenging to make sense of the large set of materials that was suggested to them after having completed the HEInnovate self-assessment questionnaire. They were often overwhelmed with the abundance of case studies, user stories, guidance notes, videos and other digital resources on the HEInnovate website.

Making the relevant selection from these resources is a tremendous challenge for leaders, policymakers, and advisors in higher education institutions. There is no simple or single best practice, because the differences between HEIs are quite large in terms of their degrees of freedom (autonomy; legal provisions), their experience (or maturity) in entrepreneurial activity, the culture and attitudes of their (academic & support) staff in the various disciplines, and – finally – their (managerial) capacity (i.e. expertise and resources).

The HEInnovate website currently provides a search menu with filters and the opportunity to search for keywords and expressions in the documents, so that users are provided with those documents that best match their information needs. However, for some users, accessing knowledge in this way is time-consuming, as they must sequentially study a set of case studies and extract the information they are after. Also, users interested in the practical interventions that may be considered when implementing change processes will have to make a considerable effort to identify the possible interventions and decide on which interventions are relevant for them.

To address this challenge, the accompanying research that took place alongside the BeyondScale project made an effort to unlock the existing academic and HEInnovate resource base on entrepreneurship in higher education. And introduced the idea of ‘**Inspiration fiches**’, as a new tool to support action plans in higher education institutions. The fiches (akin to cards) provide a condensed overview of possible interventions, potential barriers and other aspects related to the change processes in higher education. They are more easily accessible to managers and practitioners in higher education who seek inspiration on how to push forward the entrepreneurial agenda in their institutions.

The inspiration fiches were made to enhance the usefulness of the HEInnovate self-assessment tool, and support HEIs in deciding on an action plan that responds to the challenges that were identified by the institutions. The fiches condense knowledge into information-rich and inspiring keywords for some of the essential features of institutional change processes. The fiches present the essential features of a change process within one of the HEInnovate dimensions (e.g., Entrepreneurial Teaching and Learning). They present (1) the typical *challenges* that motivate HEIs to engage in the selected HEInnovate dimension, (2) the typical *interventions* used by HEIs to respond to these challenges, (3) the *inputs and resources* HEIs employed to implement the interventions, and (4) the *barriers* that HEIs had to overcome during the change process, along with the *solutions* to overcome them. Thus, the Inspiration Fiches support the search process for HEIs that are starting on a transformation journey towards becoming more entrepreneurial in a particular HEInnovate dimension.

In addition, the BeyondScale partners felt there was little information available on the HEInnovate platform on the topic of social entrepreneurship. It was felt that there was a large focus on for profit entrepreneurship instead of initiatives and issues that involved working with (or for) the not-for-profit sector. To address this shortage, the accompanying research in BeyondScale produced an Inspiration fiche dedicated in particular to **social entrepreneurship** and the so-called Third Sector. This particular type of entrepreneurship may be added to the HEInnovate tool – either as a separate HEInnovate dimension or as part of its dimension ‘Preparing and Supporting Entrepreneurs’.

### 5.3 Challenge 3: Learning form others

When having to decide on the actions to undertake for making the entrepreneurial transformation and what to keep in mind in terms of potential obstacles and facilitators to consider, it always makes sense to learn from other experiences. As mentioned above, for this, one can make use of the experiences of other HEIs, or of the academic literature and resources made available through the HEInnovate platform. However, for the BeyondScale partners one of the most valuable experiences was to be able to learn form other HEIs that are in the same situation and that are also interested in change processes. However, it is not only learning *from* others, but in particular learning *with* others. Exchanging experiences with other HEIs is seen as very valuable. Although such interaction these days can take place on-line, and can be enriched by tools such as Mural, there is an advantage of real in-person, face-to-face conversations. The Covid situation made this difficult, but despite

this, the BeyondScale partners managed to start discussing common interests and approaches on the on-line platforms (Teams, Zoom).

A lesson learned is that trust between partners and knowing about each others' background and interests is conducive to the information exchange. Knowing the profile of your partners then is a good starting point. Such a profile can be made available on-line – using the digital tools and examples that are ever-present these days. As part of BeyondScale, a **DigiBuddy system** was constructed – as a pilot to test out how representatives from HEIs could be assisted in finding other HEIs (say, buddies) with which they can exchange information, experiences and discuss potential actions to undertake when trying to become more entrepreneurial. The DigiBuddy tool so far was tested only on the selected set of BeyondScale partners, and further enhancements may be made to the tool before it can be scaled-up.

#### 5.4 Challenge 4: Assessing progress on the transformation journey

All BeyondScale partners were involved in their own inbound and outbound change projects. They started with applying the HEInnovate self-assessment tool (including additional questions) and then proceeded with a Value Proposition workshop and the actions agreed after that. In further workshops and activities, the interventions suggested in the VP workshop were followed up.

One of the biggest challenges in this transformation exercise was to keep all interested stakeholders motivated, deliver on the agreed plans and make sure sufficient progress was made. Projects always are confronted with unexpected events (e.g., Covid), which call for further action, investing additional resources (e.g., time of staff). Having a sufficiently detailed project plan is always a *sine-qua-non*, and this usually is in place. However, the project leaders in charge of institutional change projects such as the ones undertaken as part of BeyondScale often found it difficult to assess the extent to which their actions had contributed to the wished-for objectives or whether the project was on track.

Checking progress and assessing impact of institutional change processes is a big challenge in HEIs. This is also one of the reasons that in the HEInnovate resource base (e.g., its case studies) there are relatively few materials devoted to the HEInnovate dimension of *Measuring Impact*.

Addressing this challenge was also something that the BeyondScale partners found difficult. As part of the BeyondScale activities, a suggestion was made to make use of tailor-made indicators and qualitative assessments for assessing where the project is and whether it has made a difference. A short **guidance note on indicators** was made available to the BeyondScale partners to inspire their use of potential progress indicators and their possible application. The BeyondScale partners were encouraged to use this guidance note to measure progress and performance in their follow-up workshops. However, many partners were quite hesitant to use the indicators, because of the work involved and the unfamiliarity with the subject. The time period for the projects in many cases also was too short to already expect very clear outcomes.

## 6. References

- AbouElenain, Reem (2019): Higher Education Engagement with HEInnovate Self-Assessment Tool: A Case Study of Nine Austrian Higher Education Institutions. Master. Danube University Krems; University of Tampere, Krems, Tampere.
- Äyväri, Anne; Jyrämä, Annukka (2017): Rethinking value proposition tools for living labs. In JSTP 27 (5), pp. 1024–1039. DOI: 10.1108/JSTP-09-2015-0205.
- Dahlan, Ahmad; Ibrahim, Jamaludin; Jalaldeen, Mohamed; Mohajir, Mohammed (2020): Redesign "University of the Future" Conceptual Business Model: Sustainability and Staying Relevant in the Digital Age. In Journal of Information Systems and Digital Technologies 2 (1), pp. 47–59.
- Osterwalder, Alex (2012): Achieve Product-Market Fit with our Brand-New Value Proposition Designer Canvas. Available online at <http://businessmodelalchemist.com/blog/2012/08/achieve-product-market-fit-with-our-brand-new-value-proposition-designer.html>, updated on 8/29/2012.
- Ruskovaara, Elena; Pihkala, Timo (n.d.): REVIEW, COMPARISON AND EVALUATION OF SEVEN ASSESSMENT TOOLS –. European Entrepreneurship Education NETWORK.
- Willness, Chelsea; Bruni-Bossio, Vince (2017): The Curriculum Innovation Canvas: A Design Thinking Framework for the Engaged Educational Entrepreneur. In Journal of Higher Education Outreach and Engagement 21 (1), 134 - 164.

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