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UNIVERSITY INDUSTRY

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Creating Impact Through Research Valorisation

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Dear UIIM Readers,

Solving global challenges, whether related to environmental, social, or economic issues, requires science to be taken beyond the university and into the public sphere. Too often, research that can provide societal benefits is not put into practice, and thus its potential to create positive impact is not realised.

The conversion of research to actual impact, or value, is called 'valorisation' and it can take many forms. From policy advice to commercialisation of a service, the final outputs of valorisation are diverse, and the processes undertaken very greatly depending on the academic. Unfortunately, academics are often unaware of the possibilities and pathways they can utilise to valorise their research, and there are many misconceptions around the topic. Valorisation is too often seen as a purely commercialisation activity, and this makes many academics, especially in social sciences and humanities disciplines, disregard valorisation as a viable option for their research.

Therefore, it is crucial that awareness about valorisation is spread through all higher education institutions, and a culture of entrepreneurial thinking is cultivated. Higher education institutions should offer valorisation support to their academics, particularly through the provision of support mechanisms and structures, such as effective Knowledge/ Technology Transfer Offices.

Focusing on these issues, the following article selection reflects how valorisation as a process can be supported and how academics can be made aware of this topic as something that can complement and endorse their work. It is also important to mention that this special issue has been inspired by two of our Erasmus+ projects, STEM_Valorise and REVALORISE+. These two initiatives, the former focusing on the valorisation of technical disciplines such as sciences and technology, and the latter on social sciences and humanities disciplines, provided great insights and inspiration for this issue.

Here we have highlighted only a fraction of the successful and inspirational stories around valorisation. We would appreciate other experiences and practices - if you have a story to tell, contact us through office@uiin.org.

We hope you enjoy this issue,

Catherine Hayward
Project Officer at UIIN

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SEAN FARRAN

Café Musings on Impact, Valorisation and Commercialisation

When I received the brief for this article, I was about to order a coffee: Different understandings of impact, valorisation and commercialisation in SHAPE. I looked at the barista, and had I said this out loud I like to think I would have got the same response as I did anyway: 'What can I do for you today?'.

I am always glad to hear this question. 'A double espresso, please.'

My morning coffee is as necessary to my functioning as universities are to societies and economies. Universities are innovation ecosystems of tremendous significance. Knowledge-based development, the importance of knowledge in sustaining innovation and competitiveness; all emphasise the intellectual capital, and intellectual property, deriving from research. Valorisation is widely seen as the process by which this research and the intellectual property it generates supports and sustains this important role of our higher education institutions.

Simply put, valorisation is the transfer of knowledge from one party to another for economic benefit. Underpinning this, is the concept of knowledge being something, A THING, that can be transferred, for example, from a university researcher to policymakers, by bringing that research to bear on recommendations for the policy. Generally, knowledge is being made use of, very much in keeping with the French origins of the word, 'to make useful, to use, to exploit', for the purpose of creating value. Whilst there is a definite shift in the way we assess value, it is still largely measured economically, and valorisation is undertaken to create economic benefit and help keep our universities running. Commercialisation on the other hand is perceived as the process of making money, with or without a transfer of that knowledge, through the creation of spin-outs or ventures...

Now hold on a minute. The EU clearly supports valorisation in a much broader sense encompassing developing products and tools to benefit society. My colleagues in the Netherlands reading this will be tapping their pens on the table and reciting the Ministry of Education, Culture and Science version of valorisation which is:

> **THE PROCESS OF CREATING VALUE FROM KNOWLEDGE, BY MAKING KNOWLEDGE SUITABLE OR AVAILABLE FOR ECONOMIC OR SOCIAL USE AND TO TRANSLATE TO (COMPETING) PRODUCTS, SERVICES, PROCESSES AND NEW ACTIVITY.**

More and more programmes across the EU cite valorisation as 'knowledge dissemination' and 'knowledge utilisation', incorporating the creation of spin-outs and ventures as well as entrepreneurship into the function and processes of valorisation. Valorisation is therefore much more extensive; transferring and translating, creating value, economic or otherwise. So where does commercialisation sit?

ASPECT (A SHAPE Platform for Entrepreneurship, Commercialisation and Transformation) is a network of organisations founded in the UK in 2018. It is funded by Research England's Connecting Capability Fund with the ambition of taking SHAPE research and mobilising that to make a measurable difference, utilising commercialisation and entrepreneurial techniques. With just 5 founding institutions the membership is now at 43 globally, sharing knowledge, resources and tools collaboratively to make the most of commercial and business opportunities from Social Sciences, Humanities and Arts (SHAPE) research.

For further information or to get in touch, visit aspect.ac.uk.

Value. The word rolls around like a marble in a maze of matchsticks, knocking new paths at every turn with the risk of igniting something nearby or further down the line. We have a picture of value as a linear function – a person has a lightbulb moment and something is created and that thing is going to be of value to society, it is going to create impact: a piece of software, a vaccine, an engine component. Something that is easily comprehensible, easily fundable, easily measurable and thus easily investable.

Whilst this may often be the case in science, technology, engineering and mathematics (STEM) where a new engine can demonstrate a percentage increase in efficiency, in the social sciences, humanities and arts the contribution of research is not always so linear. This is recognised in the terminology of SHAPE. For those unfamiliar with the acronym, SHAPE stands for Social Sciences, Humanities and Arts for the People and the Economy. The P and the E are crucial, because it communicates the nature of social sciences, humanities and arts and where they create value, and like people and the economy, these subjects do not exist in isolation. The impact of research in these areas often does not come from one piece of research, one lightbulb moment, but cumulative experience, often over decades. The value of that research, the impact it can create, is the accumulation of evidence that links through to the persons who have undertaken the work, and the knowledge and experience they bring to creating a solution. This value of research contributes to the social value - the net benefit that an organisation, a project, a programme has on society, in increasing peoples' wellbeing and quality of life. Yes, it is a process of valorisation, but it is difficult to measure the impact of this knowledge use.

Calculating the impact of research in SHAPE subjects is very challenging. There are multiple pathways to impact, many channels, many actors, many disciplines. Professor Susana Mourato, from the London School of Economics and Political Sciences, gave a memorable example in a talk hosted by ASPECT (A SHAPE Platform for Entrepreneurship, Commercialisation and Transformation) on the subject of measuring the success of research commercialisation:

Let's say someone writes a book on social science explaining nudges and framing effects, a CEO of a supermarket reads that book and gets inspired to reduce the use of plastic bags in his supermarkets. The metric of impact would be the number of plastic bags used; the indirect impact could be that marine life is saved because of reduced plastic litter in the sea. Those are metrics of impact. But what we want to know is how does that affect wellbeing, and so we need to try and monetise that and find out how much people are willing to pay for species conservation and therefore uncover the monetary value of these particular impacts. How many people may have read that book and changed their behaviour?

Just from this one example we can see that it is almost impossible to measure the impact of that one piece of SHAPE research. We know a lot about social value, and we know a lot about impact, but there is much work to be done in understanding the causal links between SHAPE research, impact and the monetary value of that impact.

Yet we are increasingly putting a monetary value on impact. 1.16 trillion USD is the estimated amount of investment capital that identifies as impact investment in 2022, and the diversity of what is classified as such is vast. Generally, impact investing is interpreted either in not doing things, such as not investing in 'bad things' like tobacco, or doing things, by investing in companies that aim to improve society and the environment. Quite a lot of understanding around the latter stems from research, particularly in the social sciences, and the companies who create the most social value are the ones who work with the beneficiaries from the outset, who have a positive impact in not only the results but the way the work is undertaken by constantly applying and practicing that research.

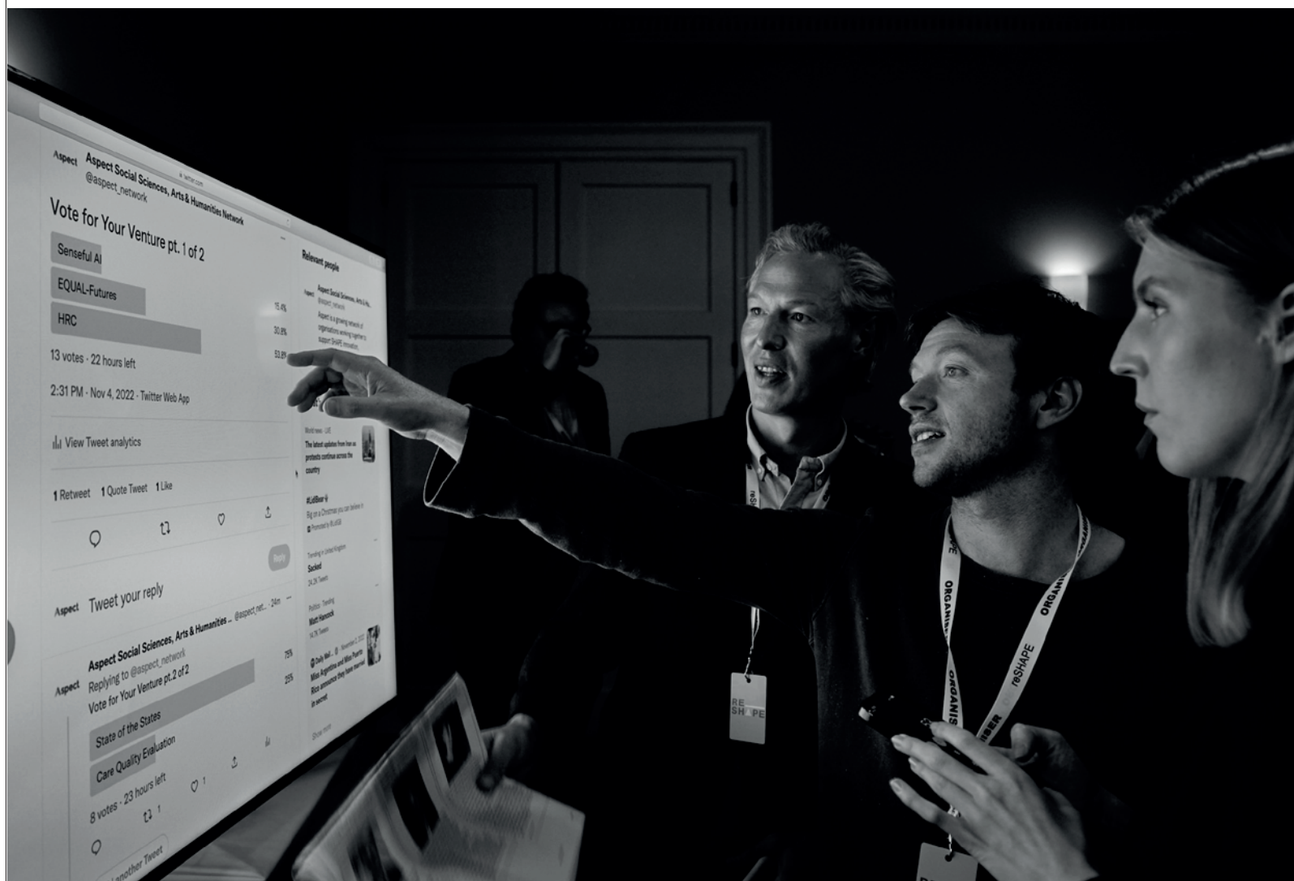
Now whether impact investing is just a rebranding of financial instruments is debatable and unclear. But there is a need for clarity if we want a better world; if we want impact investing to support real impact. Knowledge transfer is going to be essential; valorisation is going to be essential, and addressing the challenge of how to measure and demonstrate this contribution to funders and the financial community beyond the amount paid for the transfer of that knowledge, especially on a per-project basis, is also essential. To address this, the intangible contribution of SHAPE research needs to be recognised; it needs to be championed in a tangible way.

What commercialisation does is that it helps us to determine demand and supply for a particular service, and as a result helps to identify value. It allows us to see where the potential is for establishing a market where it didn't exist, as we have seen with carbon values, biodiversity offsets etc. Whilst enabling measurements of value, more broadly, commercialisation helps showcase the role and impact of SHAPE research, as a mechanism that translates the value of research. This is the remit of ASPECT, in supporting a pipeline from student entrepreneurship to researcher engagement that takes the abstract nature of knowledge derived from SHAPE subjects and formulates that into ventures, presenting new pathways to deliver impact and helping others to understand the role and relevance of SHAPE research in creating value; making the intangible tangible.

When ASPECT launched in 2018 it was with a handful of people in a room representing a small group of universities. Today we have over 40 universities as members worldwide (and growing), and welcome a huge diversity of people from researchers to businesses, investors and VCs to policymakers at our meetings and events. Through collaboration across members, awareness to the role of commercialisation in the ecosystem of valorisation to create and demonstrate impact is, likewise, growing. Central to this is continual experimentation, without which, in any sector, we would not be able to ask, 'What can I do for you today?'. It is this that lies at the heart of SHAPE; understanding the needs of people in their interactions with the natural and physical world, and thus at the heart of commercialisation in SHAPE; the opportunity to stimulate socially responsible innovation and to create impact at scale. ■

IMAGES CREDITS: p. 4 & 5 - ASPECT

SEAN FARRAN is Head of Communications, Advocacy and Stakeholder Engagement for ASPECT.



CHRIS FELLINGHAM

How do We Build Awareness of Valorisation

Beyond the Usual STEM Disciplines Amongst Researchers and Their (Potential) External Partners?

There is a slow but sure emergence of Social Sciences Humanities & the Arts for People and the Economy (SHAPE) researchers - and universities looking to use valorisation as a means of generating impact from SHAPE research. ▶

There is a slow but sure emergence of Social Sciences Humanities & the Arts for People and the Economy (SHAPE) researchers - and universities looking to use valorisation as a means of generating impact from SHAPE research. Traditionally, valorisation would be heavily focused on the Science, Technology, Engineering and Mathematics (STEM) disciplines and there was a certain logic to this. STEM tended to produce physical things like engines, molecules, devices; all of which required commercial engagement to produce and deliver to customers. Furthermore, there were established sectors - companies to licence to, Venture Capitalists to invest and governments very willing to trumpet - what they hope will be a growth sector of their economy. That means that for the few (and it is a minority) of STEM researchers who want to go down this path - they probably already know about their technology transfer office (TTO) or know someone else who does, and more importantly they probably already accept valorisation as a reasonable path.

Neither are necessarily true for SHAPE researchers, TTOs are probably largely unknown outside of STEM, and SHAPE researchers may not be aware of what valorisation even means and have more reservations. After all they will have few peers who have gone down this route. How then - do we establish awareness?

The first is messaging. There has been a lively debate in the UK over the right words to use: commercialisation, spin-outs, startups... but the one that seems to be gaining traction is University of Bristol Julian Jantke's term, impact at scale. Julian's point is there are many ways to generate impact but to sustain impact and to do it at scale, spin-outs are often the best route.

Secondly, the university needs to decide what it wants. If by valorisation it wants spinouts and licences then it should say so, as some universities create vague innovation agendas where the word is so muddied with different ideas that no researcher knows what it means or what the university is asking. To enable action in researchers, the language has to be clear.

Thirdly, resources. The university must dedicate staff and funds - SHAPE researchers are coming from a low base (in terms of researchers doing valorisation), emails and posters won't cut it and if there are no funds, researchers will ignore the message as they will believe the university is not serious. Run events, run competitions, get a person who is the point of contact and make them do the rounds. All of this needs to be exclusive of STEM. The classic mistake is a general competition where SHAPE researchers will feel inferior to the medical scientist whose algorithm detects cancer. SHAPE needs its own space to be nurtured and to understand valorisation on its own terms.

Fourthly, work with the willing. As with STEM, the vast majority of researchers won't ever engage with this, a nontrivial number will probably be opposed. Valorisation is hard work and requires motivation of the researcher - if they aren't willing don't push them. The same logic works at a departmental level, some departments will be more geared towards valorisation. In my experience, those in applied areas (Geography, International Development, Education for example), those with more interdisciplinary skills, and those who often work with external partners, are more likely to undertake valorisation and likely more open to it, as doing research with external partners is a good intermediate step in mentality and practicality of the research. Your resources are limited so you need to focus your efforts strategically.

The final part is the fast forward. Let's say you've done the above, and some SHAPE researchers have gone down the path of valorisation and perhaps have successful spinouts. You now need to turn them into ambassadors for the work. Despite all your efforts, nothing builds credibility faster among researchers (or all people) than what their peers do. Having a geographer tell their fellow geographers that valorisation is okay will always be more powerful than the university telling them. A quick tip, you can borrow researchers from other universities to fast track the process.

Above is a rapid-fire summary of how to raise awareness of valorisation in SHAPE. It's about the right language, it's about resources and a dedicated space for them to be nurtured and it's the powerful effect of seeing their peers - researchers like them - go through it and show them it's something they could think about. ■

CHRIS FELLINGHAM is the Social Sciences and Humanities Lead at Oxford University Innovation & Co-Founder and Director of ARC Accelerator.

CATHERINE HAYWARD

Role Models for Valorisation

Despite the importance of valorisation for creating benefits for society and tackling pressing challenges, many university actors are still unaware of the concept. Too often, commercialisation is considered the only route for academics to translate and transfer their research beyond the academic realm. ▶

In order to better understand valorisation, and thus create awareness around the topic, UIIN has been working with universities and industry to identify pathways, barriers & drivers, and support mechanisms for valorisation.

Through conducting research, we were able to obtain greater insights into the competence needs of academics and the support they require to be able to valorise their work effectively. To ensure a breadth of resources were analysed, we examined the literature on valorisation, undertook surveys and interviews with university professional staff, and explored the characteristics of different existing training programmes that aimed to instil the competences related to valorisation in academics. One of the most important inputs we gained was through interviewing 'Valorisation Champions'.

The role of the Valorisation Champion

To identify and describe the knowledge- and skills needs of academics, regarding their valorisation activities, and their motivations for undertaking valorisation, researchers from science, technology, engineering and mathematics (STEM), as well as social sciences and humanities (SSH) disciplines were engaged in structured conversations. In all cases, the academic in question had previously undertaken valorisation of their research.

To ensure other academics are able relate to these stories and be inspired by their peers, the profiles and achievements of Valorisation Champions outline the valorisation journeys and learnings through a more personal perspective.

In some cases, we even engaged with academics that were unsuccessful in their valorisation journeys. These 'fail stories' contain their own kind of value, as failure should not be thought of as the end of the road, but rather as an opportunity to pivot one's research or approach - learning an important lesson along the way.

Insights into valorisation

Valorisation Champions also presented their motivations for valorisation, the pathways they took to create impact from their research, and the barriers they faced and how they overcame them. This showcases the wealth of similarities between the STEM and SSH Valorisation Champions. The differences mainly manifest in the fact that STEM valorisation often results in products that can be commercialised, while SSH valorisation tends to create something less tangible. Therefore, the process or pathway of valorisation may vary between the two groups, but their motivations, competences required and support needs are comparable.

Valorisation Champions' main motivation to undertake valorisation was to create meaningful societal impact, and their activities ranged from the development of commercial products to creating new processes and services used by communities.

Important competences for successful valorisation, as emphasised by Valorisation Champions, include the ability to communicate one's research effectively to a non-academic audience, being able to collaborate with external stakeholders and being adaptable to change. A prevalent barrier to valorisation was the belief that undertaking valorisation, particularly in the form of commercialisation, would compromise their academic integrity, curiosity, and independence. Barriers could be overcome with support and guidance from supervisors, Knowledge/ Technology Transfer Offices and start-up accelerators.

Awareness raising

Telling the stories of Valorisation Champions functioned as an awareness raising campaign on two fronts: raising awareness amongst those academics that read these cases and amongst the Valorisation Champions themselves. Oftentimes, the Valorisation Champions were unaware that what they had undertaken was, in fact, valorisation and came to gain a better understanding of the definition of the concept through the interviews.

Along with gaining greater insights into the processes and needs of valorisation, our intention when engaging the Valorisation Champions was to showcase the breadth of possibilities open to academics across disciplines, who want to create greater societal impact from their research. These stories will function as sources of information and inspiration for the Valorisation Champions of the future. ■

Get inspired by looking at our STEM_Valorise Digital Gallery and REVALORISE+ Lighthouse Stories.

CATHERINE HAYWARD is a Project Officer at UIIN.

WESTERN SYDNEY UNIVERSITY

The Impact of a Dedication to Sustainable Development:
Western Sydney University

This year, Western Sydney University (Australia) was named first in the world for its social, ecological and economic impact in the Times Higher Education University Impact Rankings. The university placed first overall worldwide in the prestigious annual rankings, which assess universities on their commitment to the United Nations' Sustainable Development Goals (SDGs). The rankings are based on universities' teaching, research, outreach and stewardship.

It was a proud moment for the university and reinforced its long and deep commitment to addressing societal challenges such as inequality, inclusive education, climate action, social justice, food and water security and environmental stewardship.

Western Sydney University's decadal strategy, Sustainability and Resilience 2030, sets out an ambitious roadmap to address climate adaptation and mitigation, and social inequality. The strategy is a call to come together as a community around key aspirations that frame a vision for just transitions to sustainable ways of living, leaving no one behind. The institution's Sustainable Energy Plan sets bold targets for campus operations to have 100 percent renewable energy by 2025 and to be carbon neutral by 2030. The university has fast tracked these targets into action, with electricity supply across all its campuses now 100 per cent Green Power accredited, four years ahead of target.

The university creates impact and delivers on the SDGs through working closely with a wide range of regional and global partners. The institution has recently joined a consortium of partners in a AU$15 million Decarbonisation Innovation Hub. As a core partner, the university is working to fast track the research, development, and adoption of decarbonisation technology and practices across sectors and regions of the state of New South Wales (NSW), helping the NSW Government to achieve its goal of net zero emissions by 2050.

Western Sydney University is also leading innovative initiatives that are tackling society's grand challenges through its teaching, research and engagement and creating lasting impact.

Tackling sustainability issues and climate change

Western Sydney University is home to 'EucFACE', a world-class experiment that simulates the impacts of future carbon-dioxide-rich climates on Australia's native forests. It is one of the world's only native forest free-air CO2 enrichment programmes, tackling the impact of climate change on natural systems.

The university is also proud to jointly lead the innovative and collaborative Australia India Water Centre (AIWC) with a common goal of addressing the critical challenge of water security, sanitation, water management and distribution in a warming climate. A foundational initiative leading to the establishment of the AIWC is MARVI – Managing Aquifer Recharge and Sustaining Groundwater use through Village-level Intervention. MARVI is focussed on engaging village communities to monitor, use and manage groundwater at the village level and has been scaled up across 20,000

villages through the Australia Water Partnership and the Atal Bhujal Yojana National Groundwater Management Improvement Programme.

With regards to sustainable mobility, research from the institution has confirmed the viability of Australia's longest stretch of 'green track' as part of the Parramatta Light Rail project. The research confirmed the green track – which will feature up to one kilometre of planting grass or shrubs between and beside light rail tracks instead of asphalt or concrete – will perform important environmental functions that improve the amenity and ecology of the local area.

In terms of educational offerings, the university hosts both '21C' and the 'Solar Car Team'. An explicitly student-centred undertaking, 21C is Western Sydney University's transdisciplinary curriculum renewal that delivers 'hybrid' capabilities that graduates of today and future leaders need to forge successful futures for themselves and their communities. New offerings for undergraduate students include specialisations in climate justice, equitable technologies, eco-social design and manufacturing, water for life and urban evolutions for smart green cities. Additionally, the university's Solar Car Team is made up of students from the fields of Engineering, Industrial Design, Computer Science and Visual Communications. Producing four cars, over a rich ten-year history, the team became the first international team to win the American Solar Challenge in 2018. The students manage every aspect of the production and design of the vehicle, as well as sponsorship, marketing and the administrative elements of their involvement in international competitions.

Championing gender equality and anti-racism

The university is a global leader in gender equality and anti-racism. It has been recognised as second in the world for gender equality, and third for reducing inequalities by the Times Higher Education Impact Rankings 2020.

The university has been recognised as an 'Employer of Choice for Gender Equality' for 17 years and was recently awarded the prestigious Athena Swann Bronze medal under the Science in Gender Equity Programme. Since 2002, the globally esteemed Challenging Racism Project has supported a new generation of anti-racism researchers and practitioners (21 staff), partnering with government, non-government and community organisations with a shared outlook on intergroup relations and anti-racism initiatives. This award-winning project in research impact in countering racism and improving community relations was the recipient of three global awards: the 2015 PEACEapp (1st in world); the 2014 Intercultural Innovation Award (2nd in world); first prize in the Realscreen Diversity and Inclusion Award for non-fiction work dealing with diversity and inclusion.

The role of the university in contributing to the SDGs

Pro Vice-Chancellor of Research, Professor Kevin Dunn, hopes Western Sydney University's focus on sustainable development, and integral focus on the SDGs will soon become common place within the sector: 'Universities can contribute to the achievement of the SDGs by ensuring their campuses and major programmes are environmentally sustainable, including being carbon neutral, fully committed to circular economies and providing environmental virtue to the regions where they are located.

'They can provide the educational opportunity for students to acquire the knowledge and skills needed to promote sustainable development and provide access to tertiary education for disadvantaged groups, build awareness of privilege, facilitate progressive coalitions and cultures of allyship.

'Beyond this they can role model good governance, transparency, evaluation, and evidence-based programme development and undertake research that aims to provide solutions to the grand challenges of sustainable development, climate change, social injustice, integrity and good governance.

'If this thought leadership is international, national and local, it will deliver enduring progress for its community and the communities it serves,' said Professor Dunn. ■

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JOSE VILLAGRAN-POLO

Spanning Boundaries Agents:

Helping Researchers Realise Their Potential

The possibility to create value out of research can go unnoticed if it is not solidly embedded into the culture and mindset of Higher Education Institutions (HEIs). As much as individual inclines matter, the existence of support structures facilitating valorisation, building bridges and guiding actions at the institutional level is indispensable to maximize both the access to valorisation and the impact that it can generate. ▶

The American industrialist Henry Ford said, very wisely, that "coming together is a beginning; keeping together is a progress and working together is success". This is true of most contexts and situations in life and research valorisation is not an exception. Researchers tend to work in isolation, indifferent to the more practical side of things and concerned just with adjusting their work to the standards and ways of the academic world.

This systematic missing of opportunities is by no means to be blamed on the researcher. As has been mentioned in previous lines, institutional culture plays a big role and being able to count on people who can drive change, break down barriers and support the generation of impact is of the utmost importance.

Acknowledging the need for identifying, understanding and training those individuals, the Spanning Boundaries Project aimed to break down the engagement barriers that exist between universities and their external business stakeholders in order to ensure the effective transfer of knowledge and innovation, whilst contributing to the enhancement of student employability and research valorisation.

Thus, the project targeted the human factor within the institutional support structures that determine valorisation at HEIs, the agents of change who, from their positions, operate in the interface of academia and industry. The champions of the collaboration culture.

The consortium set to identify, define and characterise the boundary-spanning qualities, knowledge and skills that are in place in different academic and business environments. The first step was to conduct an extensive literature review to understand the capabilities, competences, qualities and activities linked to the Spanning Boundaries Agents. This search resulted in 75 papers that were complemented by the consortium with the review of scientific and grey literature at the regional level.

The literature review was followed by a qualitative study in the form of an interview survey conducted among Spanning Boundaries Agents from different European countries. The aim was to identify objectives and motivations that inspire these individuals to undertake boundary spanning activities, as well as the type of resources and supporting mechanisms they have at their disposal.

Lastly, a quantitative questionnaire was developed, based on the learnings obtained from the two previous activities, to determine knowledge, skills and positions of these agents of change. This questionnaire was distributed to over 2,500 individuals from HEIs, intermediary organisations and businesses in the partner countries. This questionnaire was completed by 500+ individuals.

In the last stage of this investigation, the consortium processed the wide range of skills, knowledge elements and competences identified through factor analysis, first, and a sense-making process, later. As a result, all the data collected was distilled into the set of 7 masteries comprised of 33 skills, knowledge elements or competencies that underpin the spanning boundaries activity across a variety of contexts:

Strategy & Vision, or the ability to apply existing knowledge to solve the problem at hand, as well as to develop a clear vision of how cooperation should work and how to reach common goals.

Collaboration, or knowing how to value knowledge for its usefulness to others and how to exploit one's existing network to strengthen existing relationships or create new ones.

Entrepreneurial Thinking & Acting, or the ability to identify and leverage opportunities, anticipate changes, conceive creative solutions and support others in their entrepreneurial activity.

Knowledge Transfer & Engagement, or knowing the processes behind knowledge transfer, IP regulations, innovation, R&D and education, as well as the human resources dynamics in industry.

Negotiation, or the ability to set reasonable goals between collaboration partners and to identify and secure cooperation from others to access knowledge.

Partner Understanding, or knowing the needs and priorities of the collaboration partner, as well as their different motivations and cultures.

Resource Acquisition & Mobilisation, or the ability to obtain funding or other strategic non-financial resources.

Through a 5-month training programme that was pilot-tested in two cohorts and counted the participation of 100+ individuals from across Europe, the masteries were transformed into learning modules to equip Spanning Boundaries Agents taking part with the knowledge, skills and tools needed to thrive in their mission. Overall, the programme has received very positive feedback, validating the masteries and their relevance for all those who want to collaborate with others to achieve greater impact. The results of the work of some of the participants can be found in this Personal Application Projects Video Series, where real Spanning Boundaries Agents pitch their projects and share their learnings from the training.

The valorisation of research adds value to the work of researchers, providing them with opportunities to obtain a greater benefit out of it and to explore new possibilities and ways to make use of the results of their work. This practical approach not only benefits the researchers and the companies with whom they engage in the valorisation process, but also generates societal impact bringing new solutions to the people. ■

This article is written with reference to the Erasmus+ Spanning Boundaries Project.

JOSE VILLAGRAN-POLO is a Project Officer at UIIN.

ELIF GÜNGÖR REIS

Valorisation:
Through the Eyes of the Researcher

Elif Güngör Reis graduated from Istanbul Technical University and has taken an entrepreneurial approach to her academic work. She succeeded in founding her own company, ARKIM, where she produces natural food preservatives. ▶

In 2007, I graduated from İstanbul Technical University (İTU), Petroleum and Natural Gas Engineering Department. As a woman, finding a job was challenging and after remaining unemployed for a whole year, I started a sales position at a food additives company. In the meantime, I completed my master's degree in chemical engineering at Istanbul University.

I realised that all the products I was selling had an importance for human life, however, they were all imported and there were no domestic manufacturers in the country. Thus, I decided to become a manufacturer of natural additives with the main motivation of making a difference in the food sector. In 2011, building on my master's degree and expertise developed, I developed a natural food preservative from eggshells. This development made me a pioneer in Turkey and the rest of the world, and I received investment support of the Ministry of Science, Industry and Technology (TÜBITAK), as well as a further grant from TÜBITAK to develop a commercial product from my research.

Later that year, I founded my company, ARKIM, and began small-scale production of my preservative, acting as the only manufacturer in the sector to produce domestic and harmless shelf-life extenders (natural food preservatives) by harvesting the power of eggshell powder. I also produce dietary supplements; my Sudayu brand is sold to both consumer and business markets.

Barriers faced

Of course, sometimes I face difficulties in my entrepreneurial journey and there are times when my motivation is low. Many people believed I would not be able to succeed.

An important barrier that I faced was the differing dynamics in the client companies and convincing different stakeholders. There were instances where I received the approval of a CEO but struggled with Research and Development staff who did not want to involve me in their work.

Drivers of valorisation

After having the support from İTU Seed, I was granted the intellectual property rights, which I believe as the most important step in valorisation. My main strength has been my market knowledge. I have good knowledge of the Chinese, European and United States markets. I have a strategic role through manufacturers, researchers and sellers as I play these roles myself.

Another key success factor for me is continuous self-improvement. I always 'educate' myself. When ARKIM needed quality certificates such as ISO, FSSC 2200, Kosher and Halal, I decided to inform myself about these certifications, in order to obtain them as quickly as possible.

In the early months of 2022, I joined Istanbul Arel University as Entrepreneurship and Commercialisation Expert and Advisor to the Rector. I also became Istanbul Ambassador of FoodHack which is one of the world's biggest food technology communities.

In fact, it's always passion that keeps me going. I am the one who always focuses on my goal. I care about keeping myself updated.

I never ignore the difficulties I've faced, I just imagine them as garbage. How many days can you keep garbage in your home without throwing it away? Events or people that make you feel bad can slow you down, if you spend more time on them than necessary, they will affect you.

Giving back to guide others on their valorisation journeys

I did not have the chance to benefit from a mentoring service from the beginning, but I now voluntarily provide mentoring service in many national and international organisations. I try my best to make people feel that they are not alone and encourage them not give up on their efforts.

I have tried to convey my knowledge by participating in many television programmes, including my TedX speech. These results don't come without hard work, but everything is so beautiful with passion!

Impact created through valorisation

Only by bringing science and industry together can we win the battle sustainability. I have prevented 38 million kilograms of food from being wasted in the last few years alone. The products I develop are delivered to manufacturers all over the world. Today, I have researchers, investors, and a family all over the globe who share my struggle and worry with me about sustainability.

I turned something we just throw away, into a food additive which is suitable for human consumption by transforming it in a value-added way. This additive, which is created from the food we throw away, prevents other food from being wasted.

Advice for future Valorisation Champions

Don't quit when you are on the way to your dreams. Today, I can be an inventor, entrepreneur, manager, scientist, industry expert, etc., but I'm not just these titles. One day, when 'my shelf life' expires, my products, efforts and passionate people whom we worked with most will remain forever.

I am not only a product developer, but also a marketeer and a relationship builder; my marketing experience and understanding of the attitudes of buyers brought my success. I advise entrepreneurs 'not to give up, always move forward – but with a more experienced version of yourself'. The journey always continues! ■

IMAGES CREDITS: p. 20 & 21 - TEDxBahcesehirUniversity

ELIF GÜNGÖR REIS is the founder of ARKIM.

Working to Enhance the Societal Impact of Social Sciences and Humanities Research

REVALORISE+
enhancing research impact

REVALORISE+ is a programme of valorisation support and training for academics and university professional staff interested in enhancing the entrepreneurial and social potential of their Social Sciences and Humanities (SSH) research, a research area often overlooked when it comes to creating value from the research.

REVALORISE+ recognises that to date, policy-makers, research funders and university boards have prioritised pursuing the immediate returns of research valorisation through licencing and patenting of the so called 'hard sciences' over the more intangible, longer-term returns and social impact of activity in the social sciences and humanities.

For more information, visit www.revalorise.eu.

Valorisation Synthesis Report

A summary of the research conducted on valorisation as a topic and its manifestation in SSH fields. This included information from the surveying of 320+ academics and university professional staff surveyed and analysing 55 valorisation-related training programmes.

Lighthouse Stories of Valorisation Champions

A collection of 16+ cases where academics have successfully valorised their SSH research. The aim of which is to inspire academics to undertake their own valorisation journey.

Training Programmes Development and Pilot Testing

Two programmes were developed in order to both support academics to obtain competences for valorisation, and for university professional staff to be able to support academics in valorisation. Pilot tests are conducted to ensure programme quality and relevance.

Asset Mapping

A collection of 50+ mapped research assets with the potential for valorisation in SSH. Each research asset is presented in the format of personal maps describing the valorisation potential of the research, relevant beneficiaries and potential collaborators.

The STEM_Valorise Project Empowers a New Generation of Impactful STEM Researchers

STEM Valorise
Empowering for impact

The goal of STEM_Valorise project is to raise entrepreneurial competences and capabilities of STEM researchers to be able to make stronger social impact through the valorisation of their research; whilst providing educational means for universities to train their STEM researchers in valorisation and entrepreneurship.

For more information, visit www.stemvalorise.eu

The STEM-Valorisation Synthesis Report

This report aims to provide a comprehensive understanding of the needs for valorisation and research-driven entrepreneurship training for STEM researchers.

The STEM_Valorise Digital Gallery

The STEM_Valorise Digital Gallery showcases the stories of STEM entrepreneurs who have undertaken their own valorisation journeys, in the hopes of making impact from their research. The Gallery displays a range of valorisation pathways from start-ups to consultancy, highlighting that the path to valorisation is not always linear and homogenous.

STEM_Valorise Researcher Training Programme

Developed based on the findings from the Synthesis Report and the Digital Gallery, the Researcher Training programme is 10-week programme which helps researchers extend the reach of their STEM research beyond academia.

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