

# Final Report

## Digital Access to Markets for Sustainable Rural Business.



## Project Information

Project Title: Digital Access to Markets for Sustainable Rural Business.

Project Acronym: Digi2Market

Project Number: 290

Project Duration: 01.09.2018 - 28.02.2022

Lead Partner: The Gaeltach Authority

Other Partners: Karelia University of Applied Sciences, WestBIC, Ulster University, Irish Central Border Area Network, Samtök sveitarfélga á Norðurlandi vestra

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## Overview

The project developed Innovative Immersive Digital Technologies Tools for SMEs. It created a B2B Collaborative Digital Platform (Digital City) with the functions:

- Host Immersive technologies (Augmented & Virtual Reality) Toolkits, adapted for SMEs
- Host Marketing and Sales Toolkits adapted for SMEs
- A platform for small SMEs to collaborate to enter new markets
- Interactive collaboration facilities for Digital Hubs, SMEs and Knowledge Providers
- Knowledge Centre on Green Standards for adoption
- Research and Marketing Platform for SMEs.

The Digital City is available at <https://digi2market.eu>

Storytelling based marketing solutions were developed for SMEs and Clusters. Its focus was on sectors using natural biological resources and supplying industries.

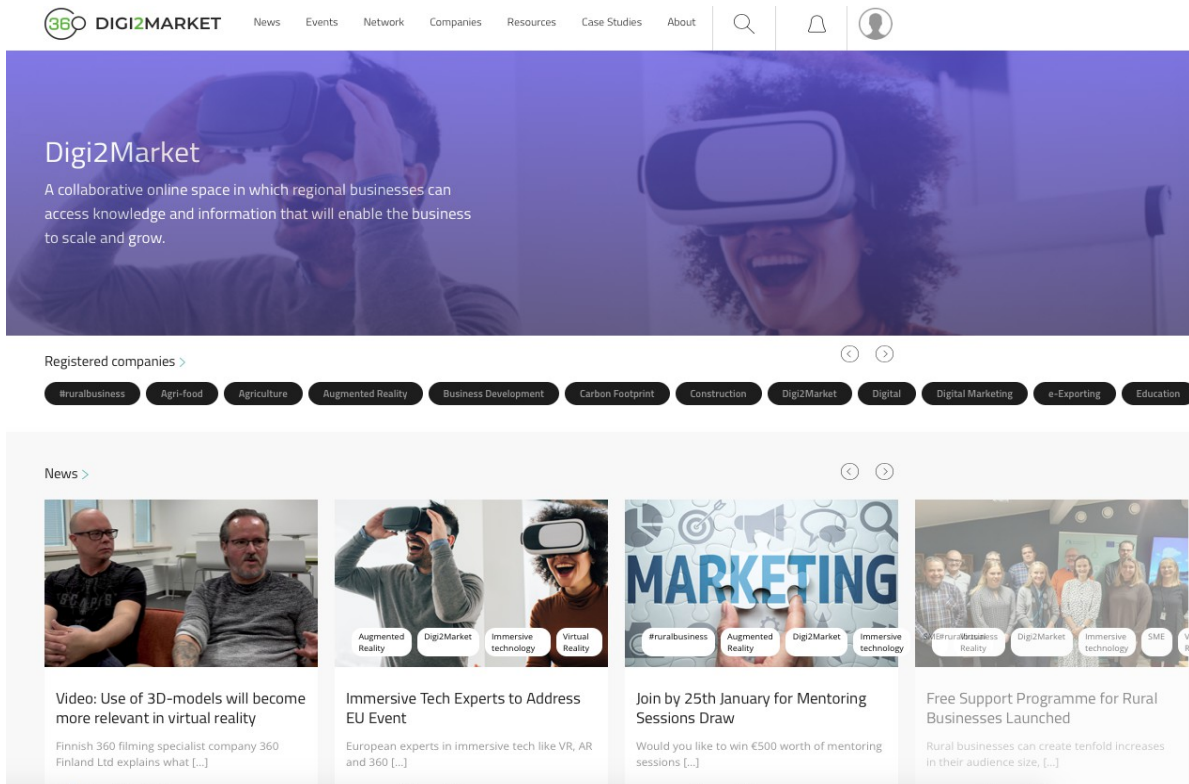
ved the objective developing three SME clusters in Green related sectors: Agri Food, a Forestry Cluster, a Sustainability Cluster by using Golf Clubs as examples of different Sustainability Technologies/initiatives. The latter two represented a change from the original intention, which involved clusters in Marine Enterprises (Food & Health Products) and Engineering Enterprises (Fabrication & Agri/Marine). It was not feasible to develop the latter two clusters because of restrictions on activities during the pandemic. This particularly affected these sectors and so the focus was changed to related clusters, showing a better response rate.

Over 100 enterprises were involved in awareness raising activities about markets beyond their local areas.

50 enterprises were introduced to and use immersive technologies in marketing activities. The enterprises were also be assisted in digitally supported environmental good practices in resource uses (taking into account supplies and deliveries). The project produced a good practice guide on Green Standards in Marketing and Sales for SMEs.

# Outputs

## Digital City Website



The website has the following achievements.

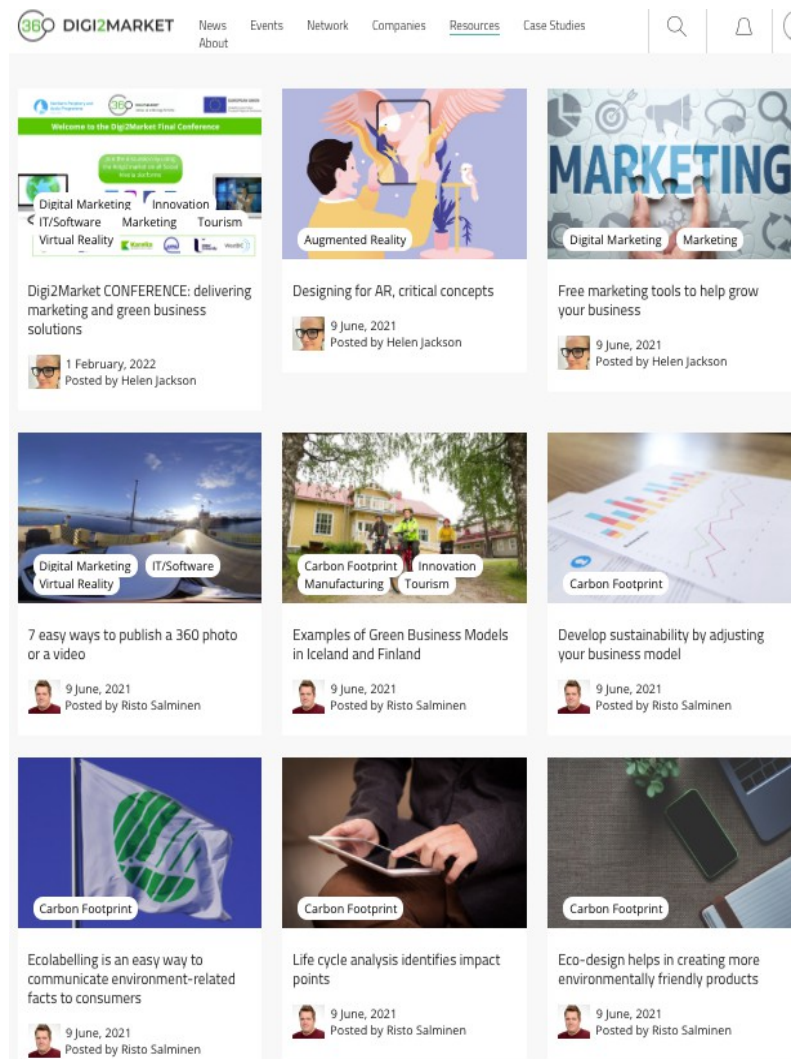
Posts	28 overall; 11 in 2022
Media	Many images and two documents: Digital Marketing Toolkit and Green Business Model – Framework. Both pdf. There are no videos.
Networks	125 published contacts
Events	2 events on Automated Marketing and Event on Agriculture, agri-food and exporting, both during project time.
Companies	49 entries plus three drafts. These include project partners.
Resources	15 published and two drafts.

The topics covered include:

- Digi2Market CONFERENCE: delivering marketing and green business solutions
- Designing for AR, critical concepts
- Free marketing tools to help grow your business
- 7 easy ways to publish a 360 photo or a video
- Examples of Green Business Models in Iceland and Finland

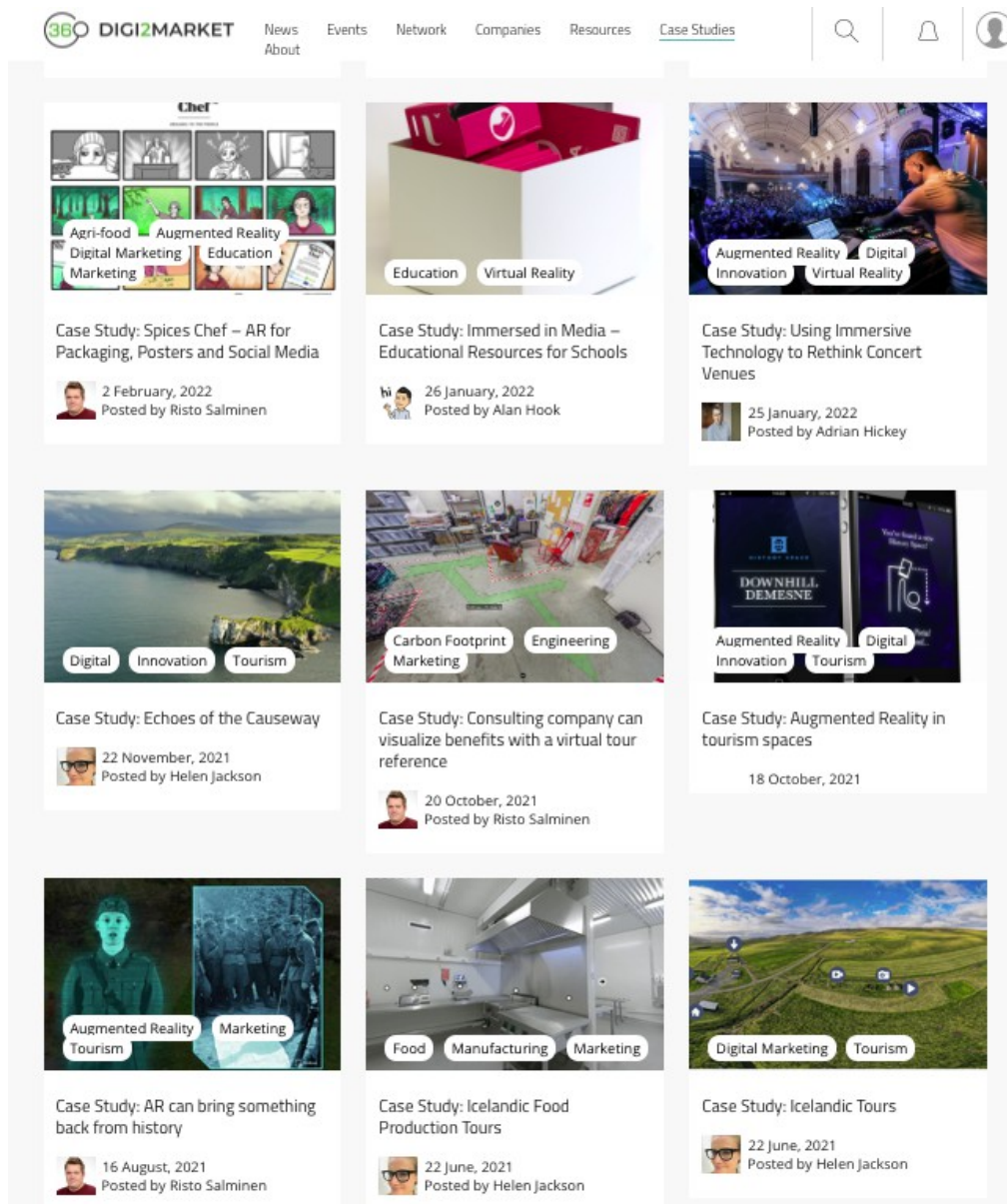
- Develop sustainability by adjusting your business model
- Ecolabelling is an easy way to communicate environment-related facts to consumers
- Life cycle analysis identifies impact points
- Eco-design helps in creating more environmentally friendly products
- Product-based approach to reduce the environmental burden
- Introduction to Green Business Model Framework
- 9 Steps to the Environmental Review of your Company
- Implementing an immersive technology solution for your business
- 4 ways to use VR in experience marketing
- Immersive Technologies Explained

Illustration: Selected tools



Case studies 23 published case studies and two drafts.

Illustration: Selected case studies on website



The case studies include review of the enterprises and the use of immersive technologies. They enable a promotion of the enterprises.

Training courses run to be accessed on the site for other learners

Through Media and Resources

Tools and sources of skills; digital tools will be examined and signposted by hyperlink

Ability to join and find people; for enterprises and organisations from the regions and elsewhere to participate

Through Networks

Examples of VR/AR, initially as examples for promotion to the target markets; later examples of VR/AR developed and in use by enterprises will be showcased on the website, hyperlinked to their websites.

Through Case Studies

Helpline - Knowledge Nexus, which will be delivered in blog style, but always moderated and answered by partnership experts.

Through posts

### ***Support to enterprises***

Altogether, 151 enterprises have been involved in awareness raising events or been contacted directly by the partners and shown positive response. 50 enterprises have developed their marketing by improved storytelling, green business model and immersive technology. 39 have adopted an immersive technology approach. Others have improved their capacity through consultancy and training, which has resulted in developed new products or versions of more traditional digital approaches (video and websites). An additional 37 have been through training programmes to enable them to implement the above approaches.

Three clusters have been established in agri-food, forestry and sustainable golf courses.

### ***SME marketing toolbox***

Digital Marketing Toolkit and Green Business Model – Framework have both been produced and are available on the Digital City website.



## **Involvement of Enterprises**

### ***Recruitment***

Partners used a variety of methods, which included their own networks, those of related bodies, such as local authorities, social media, website and direct contact by e mail and phone. The most effective means were through their own networks and those of related organisations. Workshops had a mixed response depending on area. In Ireland a workshop attracted 50 companies overall, whereas a conference in Iceland brought in few beyond those already identified. In two cases, there were parallel or complementary projects, which enabled a wider search and the channelling of enterprises into the appropriate project. It was essential to have information to send to the enterprises on them contacting the partner.

### ***Enterprises' needs and expectations***

Enterprises were looking for expanded markets; they were often struggling with on line marketing during COVID, shifting goods through the net.

Companies were often micro business of one or two people, who needed to learn to do things themselves. Companies were concerned with improving marketing and day to day operations.

### ***Enterprise understanding of immersive technologies***

With the partial exception of Karelia, where some companies had seen competitors do it and had ideas on virtual tours and packaging there was a low a low understanding of immersive technologies. In North West Iceland, enterprises did not know what it was. In Ireland, very few had experience of immersive technologies. One company had bought a 360° camera out of 60 contacted. In Northern Ireland several businesses were not ready; they thought of it as a bit gimmicky.

Overall most enterprises engaging were happy making further steps, e.g. new web page and some were more engaging. In Ireland, some enterprises, which had an early interest were looking for reliable information, but were overwhelmed with what found on line. Others that were further along in gaining information were looking for explicit guidance.

### ***Understanding developed during the project***

There was a change of understanding largely focused on business to customer relations. Walking through the video was an extremely good learning experience. This was bound up with the development of the story. It could also be linked to the Green Business Model and organisational change. Enterprises learned to overcome obstacles linked to capacity of Internet to market services abroad, especially tourism.

There was a problem as the technology needs 5G speeds, which are not available everywhere. ICBAN reported that the project gave the owners of micro-businesses the confidence to do things. The experience also stimulate the need for basic digital technology.

There were actually business results in the project timeline: one Northern Ireland firm is now making more rapeseed sales to UAE. There were also some transfers of expertise among the partners and the firms. One innovation was putting the QR code on beer mats, which got attention and was transferred from Ireland to Iceland. Some enterprises are now passing the message of 360° journey on line. In Karelia, where enterprises learned with students, they have moved to a different level and

can now make specifications to professionals.

### ***Changes of response during the project***

Although there was a general improvement of knowledge and expertise of enterprises engaging in the project, there was a drop off of numbers involved during the project as the services delivered became more intensive and so demanding time of the enterprises. For example in Iceland, 11 were initially recruited, eight followed through several steps, but only five completed them all. Similarly in Ireland, the numbers dropped from 50 recruited to 35 engaged in story telling and 24 completed the process. In Northern Ireland the figures were 13 completing from an initial interest of 22. In Finland, there were 15 enterprises gaining from collaborative work on IT out of 38 being made aware of potential.

These figures can be explained by other business pressures, which precluded the small numbers of staff being able to devote sufficient time to the processes involved.

## **Contribution to the programme results**

Specific Objective 2.2: Greater market reach beyond local markets for SMEs in remote and sparsely populated areas. As a result of transnational cooperation, has the project result of an increased awareness of and increased capacity to act on business opportunities beyond local markets to overcome challenges faced by SMEs in remote and sparsely populated areas, such as a small customer base and long distance to market.

### ***Impact on SMEs' market reach***

The result indicator is an increase of 39.5% of SMEs having the above-mentioned awareness and capacity.

This project has contributed directly to the programme result in this area and the indicator specified in three ways. The first has involved awareness raising of immersive technologies and related story telling through a variety of means, which have included workshops, physical and virtual, promotion through websites, social media and advertising, and direct interaction with enterprises. In this manner over 100 enterprises have become more aware of the potential for reaching distant markets through the application of digital technologies.

### ***Immersive Technology Applications***

Secondly, actual applications have been developed for 50 enterprises, which have been enabled to use immersive technologies as part of their marketing reach. Their marketing approach has been further enhanced by the interaction during the technology development, which has clarified brand identity and marketing platform for the involved enterprises. Some enterprises have seen increased sales since the immersive technology went live. These have included the increased sale of rapeseed from Northern Ireland to the United Arab Emirates.

### ***Clusters***

Thirdly, three clusters have been set up in agro-food, forestry and sustainable golf courses, which will continue to stimulate these developments.

## **Benefits of Transnational cooperation**

The transnational cooperation has been vital for achieving the results. The results of the project have involved transboundary actions to create the digital city, with its different aspects. The actual service delivery to enterprises has involved three prime elements: the application of immersive technologies; the accompanying brand and marketing storytelling, and the development and application of a green business model. These have resulted from the different expertise of the partners. The University of Ulster has driven the application of immersive technologies and provided the essential expertise enabling their application throughout the partnership. Údarás has developed and applied the brand and marketing storytelling approach in cooperation with WestBIC. This knowledge has been transferred throughout the partnership and found application in all areas. There have also been specific knowledge transfers, for example on leather processing from Iceland to Ireland and on the use of QR codes on beer mats in the reverse direction, which has affected a few enterprises in their main activities.

Immersive technologies are constantly developing and did so during the project. The combination of technology, marketing and green business practices has enabled innovation in business support in all the participating regions. This in itself has stimulated learning by participants, which has been acknowledged and treated as a major benefit by all partners. Staff have now a much higher level of expertise in all three areas and their combination than before the project and they have become part of daily application.

The three clusters will continue their cooperation beyond the end of the project. In addition, the partners have developed such good working relationships that they wish to take the lessons of Dgi2Market forward in future cooperations in NPA and other arenas.

### ***Partner's views of international cooperation***

All partners stated benefits of international cooperation. For Karlia UAS, the most important benefits were learning about NPA (it was their first experience), similar challenges in other regions in terms of population sparseness, but also cultural differences. For the University of Ulster and SSNV, it was seeing what is happening in other regions. SSNV also learned how to deliver IT products, gaining technical skills.

### ***Benefits to participant organisations***

The partners summed up the principal benefits to their organisations.

Údarás: learning about lack of marketing expertise in companies. They need more support, which has resulted in developing support structures. Green business model; theory and application, getting structures in place to eliminate carbon.

ICBAN: the results of networking and transfer of learning from partner to partner cascaded to businesses and there was transfer among enterprises. The website enables business networking.

Karelia UAS: the speed of development has gone on rapidly; early adopters are spreading the message. Participation is growing with international projects.

SSNV: Understanding PR, how companies grow from participation, learning how to adapt technology to new situations.

Ulster University: innovation in broad sense. WestBIC: Understanding the start ups can reach larger

markets and that there are more opportunities to reach the markets. WestBIC can help internationally focussed start ups.

## **Impacts**

The project has made impacts in the following areas.

### ***Improved competitiveness***

Digital City has resources available to SMEs: those involved with immersive technology products will be able to get advice on updating them and developing others. VR/AR will be showcased on the website, hyperlinked to their websites.

50 enterprises are assisted in developing their marketing through the application of immersive technologies.

The Marketing Assessment Toolbox makes available digital tools to support SMEs

### ***Building institutional capacity***

By using the Digital City and the Marketing Assessment Toolbox, six support organisations increase their capacities in gaining expertise in understanding and delivering marketing support based on immersive technologies.

### ***Raising awareness***

Over 150 enterprises are made aware of opportunities to use immersive technologies to extend their markets.

### ***Changing attitudes and behaviour***

50 enterprises are assisted in developing their marketing through the application of immersive technologies. This changes attitudes to immersive technologies and behaviour with regard to all digital technologies. The storytelling process of developing the immersive applications clarifies the nature of branding and marketing and changes behaviour in both aspects.

## **Geographical reach**

The project's impacts during the period of operation were in the participating regions. West of Ireland, Pohjois-Karjala, Landsbyggo and Northern Ireland.

## **Transferability**

The outputs were promoted at a final conference, held over two days, and promoted across NPA and beyond. There were presentations on the nature of immersive technologies and the benefits to enterprises in going beyond their local markets. The results of the project remain available on its website. A project, GLOW, which sought to develop the results and expand the partnership. This resulted in an application to NPA, Glow 2, which expanded the area to Nordland, Norway and Lapland, Finland.

### ***Relevance to the Arctic and sparsely populated regions***

The Digital City and related immersive technologies applied enabled enterprises to use immersive

and other digital technologies to overcome the distances to market and improve marketing techniques. They were also assisted in the creation of three clusters to share and develop their expertise.

The project has promoted and continues to promote its results through project and partner website and through the increased expertise of the partners. The responsiveness of new potential partners to a successor and more specialised project (GLOW 2.0) is demonstrated by the adherence of Nordland and Lappland partners to it. This project has made a priority of involving underrepresented groups in its formulation.

## **Challenges**

There were difficulties in recruitment, managing expectations, working with contractors and demarcation of responsibilities.

The financial costs of implementing the technology made it difficult to overcome the reservation of entrepreneurs before seeing the benefits. Managing the expectations of SMEs was a problem in view of their level of knowledge and often involved them in changing their minds. In one region this presented a problem in working with a production company, who expected clearer communication of needs and requirements from the enterprises. There was also a technical problem in developing AR tools that work on Facebook

## **COVID lock downs**

Management around COVID created logistical issues in deploying the technology. Lock down regulations could change week to week. Distances, especially covering the West of Ireland presented a need for more cameras to meet the short periods available in different locations. Recording is a 48 minute process, which needed a lot of company time. The project did request and receive an extension to cover the delays, which lockdowns imposed. The project has completed its tasks using the resources originally specified in the project contract. It has not spent its travel budget because of the travel restrictions of lockdown. The human resources have had to be redeployed to far more distance working both locally and internationally.

Although largely a hindrance, the lockdowns did focus the minds of entrepreneurs on on-line solutions to their business problems. The delivery of immersive and other digital technologies has probably been accelerated by this experience.



## Lessons learned and disseminated

The main lessons learned were disseminated at the final Digi2Market Conference on Digital Transformations – delivering marketing and green business solutions, delivered on line 26<sup>th</sup> to 27<sup>th</sup> July 2022.. These are set out below.

### ***Understanding immersive technologies as marketing tools for business***

Tom Houston (Sentireal): Immersive technologies and business: insights into working with smaller organisations, developing sales and marketing, and business growth strategies.

Evelyn Ýr Kuhne (Lýtingsstaðir): Immersive technology solutions, a case study of a small family run business in the North of Iceland merging traditional farming with a high-quality touristic service. Discussion of her experience of work with the Digi2Market EU project in the development of an immersive technology market solution for the business.

Susan Talbot: Training and Development Opportunities in the Immersive Tech. Network Manager for Immersive Technologies at Skillnet Ireland – discussion of the opportunities for various sectors to expand their immersive capabilities through tailored, subsidised, learning programmes.

### ***Understanding training and business needs to deliver immersive marketing solutions***

Jack Morrow (RETiniZE): Adoption of Immersive technologies by SMEs – marketing and training needs. Discussion of experience in the challenges and opportunities for business in delivering immersive solutions.

Âskell Heiðar Âsgeirsson How to use VR in the tourism sector

Helen Jackson (Ulster University): Assigning costs to immersive technology development

### ***Delivering Sustainability in SMEs***

Ingi Björn Sigurðsson: How to build a sustainable ecosystem for start-ups

Gunnar Ólafsson: “Djupid - Innovation Ecosystem at the end of the road”

Kimmo Turunen (Kontiolahti Outdoors): Sustainability practices in international outdoor event management. How sports activities and events can be more sustainable and improve competitive advantage with environmental work.

Lasse Okkonen (Karelia University of Applied Sciences): How university and SMEs can collaborate successfully in environmental management