









# **CIRC4LIFE INNOVATION CAMP 2021 Guidelines for participants**



#### Dear participant,

#### WELCOME TO CIRC4LIFE VIRTUAL INNOVATION CAMP.

The CIRC4Life is a project supported by the European Commission H2o2o circular economy programme (grant agreement No. 776503), with project budget of 7.3 million Euros. The project developed three new circular economy business models (CEBMs), including co-creation of product and services, sustainable consumption and collaborative recycling and reuse. These CEBMS have then been demonstrated in four industrial sectors including LED lighting products, vegetable farming, meat supply chain, and recycle/reuse of tablets.

We invite you, Circular Economy experts, to participate in the virtual innovation camp, working together with CIRC4Life consortium partners to co-validate the developed CEBMs and solutions and identify future research and market opportunities.

The CIRC4Life Innovation camp is a carefully prepared and facilitated virtual innovation sprint which brings together about 70 leading experts/specialists and industrialists across the world who have a passion for systemic change. During the Camp, experts will have a unique opportunity to assess CIRC4Life project results and to identify most promising Circular Economy business models and solutions for future market uptake.

We are looking forward to welcoming you at our Innovation Camp!

Best regards,

#### Professor Daizhong Su

Coordinator of the EU H2020 CIRC4Life project www.circ4life.eu Head of Advanced Design and Manufacturing Engineering Centre, Nottingham Trent University, UK



#### Innovation Camp organizers contacts:

Laurea University of Applied Sciences, Finland circ4life@laurea.fi

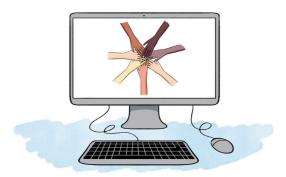
## Technical difficulties or issues? Please contact:

Aletta Purola / aletta.purola@laurea.fi +358043588818

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# 1. What is the CIRC4Life Virtual Innovation Camp?

Cir4Life Virtual Innovation Camp is an open innovation sprint where multidisciplinary and multicultural teams work on evaluating and validating circular economy business models and key innovations. The Camp will also identify most promising innovations for market uptake and further research.

The Innovation Camp will be organized virtually in Zoom and Howspace. You can join the sessions using the links in the agenda. You will also receive calendar invitation with the links.

A personal invitation to Howspace will be sent separately to your provided email. Please check your junk email folder as the invitation quite often ends up there.

Kindly keep in mind that both Zoom and Howspace invitations are personal and shall not be shared with other people!

#### **Online Interaction**

The Camp will be organized virtually, and participation requires a computer, good internet connection, webcam, headphones and a microphone. Make sure that your camera and microphone are working prior the Camp!

In order to participate, you do not need to install any apps or software to your device. Detailed guidelines for voting, commenting and other crowdsourcing activities will be given to you by facilitators during the sessions.

The innovation camp is all about sharing the knowledge and learning from each other. Participating to the camp requires your full attention and participation and we encourage participants to close their mobile phone and not to use any other software, such as email, during the presentations and the interactive workshops.

We encourage all participants to interact on social media before, during and after the Camp by:

- Following CIRC4Life on Twitter: @Circ4L, and tweeting about the meeting using the following hashtags: #CIRC4Life; #circulareconomy; #InnovationCamp2021; #H2020. It is also possible to address your tweets to @EU\_H2020
- Follow the Linkedin page. Feel free to suggest posts during the Camp and use the same hashtags as for twitter.

All talks are "bloggable" and "tweetable" by default, but organizers can explicitly request that certain talks, slides, or findings be left out of the social media conversation. We ask all attendees to refrain from:

- Recording or reproducing audio, video, or photos of other participants without their permission;
- Taking screenshots of the camp activities and reproducing them without permission;
- The use of rude and profane language across social media platforms.

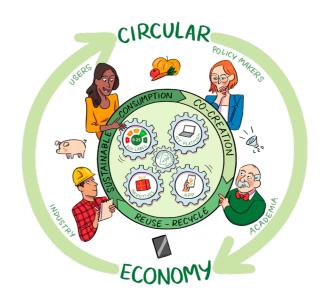


#### Play rules for collaboration during the workshops



- 1. We are a team which consists of experts from different fields: Every participant is an expert with all the knowledge of one's life. During the Camp, we are aiming achieve our goals both as an individual and as a team. Therefore, the different kinds of players with varying expertise are essential.
- 2. Safe and secure environment, trust and respect: Follow the democratic working rules and respect your team members. Other's opinions might conflict with your opinions since their knowledge comes from a different domain. The conflict of opinions is intentional, and we do not need to be afraid of that but instead use that as an advantage.
- 3. Listen, articulate and respect the group decisions: Every participant is entitled to a balanced opinion. Respect the decisions made by the group even if that was not your favourite option.
- 4. Be honest, open, and committed: Help others to grasp your areas of expertise and have the patience to explain when needed. Remain concentrated and available for discussions. Each team member is counted on to be an active and committed in the evaluation and validation.
- 5. Be available for interaction: Make sure well beforehand that your audio and video connections are working and open the Zoom-link 10 minutes prior to the start of the event. Videos will be used during the interactive co-creation events, so ensure that you have good lightning in front of you and that your background is clear. When you register to Zoom, please use your first name and last name and include your affiliated organization in parenthesis after your name, e.g. Jaakko Hannula (Laurea)

- 6. Virtual co-creation is a different experience from the traditional face-to-face methods with both pros and cons. Virtual environment provides anonymity for example for voting and we have selected online tools that are easy to use and support the objective co-creation process and working methods. On the other hand, discussions require additional effort, as not all the social interaction cues are available to us through video and audio alone and people talk out of turn more easily. Technical issues may occur, and we have technical support at hand, but we ask you to be patient if you encounter any technical issues.
- 7. Pay attention to timings and instructions: Respect the timer and use the given tools. The work is divided to smaller sub-tasks and it is important to concentrate on the task at hand and its time restrictions, since many follow up tasks are grounded on the previous work.
- 8. If something is unclear, ask the facilitator: Your facilitators are at your disposal. Rely on that they will always tell what to do next!
- **9.** Take care of your brain: Drink, eat, take another angle, and stretch your legs during the breaks. Online co-creation is intensive, so make sure to have a breath of fresh air and step away from the screen when possible.
- 10. Enjoy the ride: Co-creating together is intriguing and insightful especially when the group reaches the flow state!





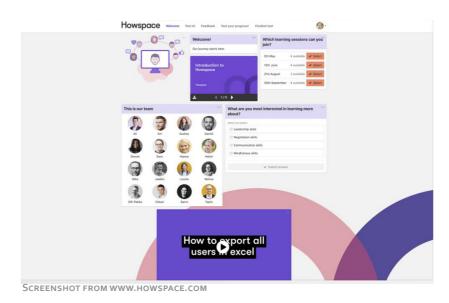
#### ZOOM

Zoom is the leader in modern enterprise video communications, with an easy, reliable cloud platform for video and audio conferencing, chat, and webinars across mobile, desktop, and room systems.

During the camp Zoom will be used for interaction requiring video and audio, such as presentations and discussions. Zoom will be used both as a main lobby area and as breakout rooms for group work and co-creation. The participants will be divided to the breakout rooms by the Zoom conference host.

It is not necessary to download the Zoom desktop application to your computer, but we recommend it for a better user experience. You can join the Zoom conference simply by clicking the provided link.

https://zoom.us/



Howspace

<u>Howspace</u> is an all-in-one digital facilitation platform specifically designed for facilitatorled workshops and events.

During the camp Howspace will be used for online co-creation and crowdsourcing activities, such as commenting, rating comments and voting. The detailed instructions for all Howspace activities will be provided to you by the event facilitators.

Howspace is browser-based and it does not require downloading any software. You can join the Open Innovation Camp Howspace workspace via your personal link sent to your provided email.

https://www.howspace.com/



#### 2. Innovation Camp underlying concepts

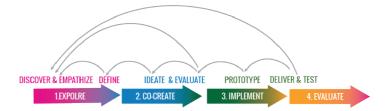
In the following the key underlying concepts in which CIRC4Life project and Innovation camp is grounded are briefly defined.

#### **Open innovation**

Open Innovation approach –Utilizing complementary skills and stimulating creativity by diversity.

Innovation is considered as "a process in which existing knowledge and inputs are creatively and efficiently recombined to create new and valuable outputs" (Felin and Zenger 2014) whereas open innovation is "the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and to expand the markets for external use of innovation respectively" (Chesbrough et al. 2006).

In practice open innovation approach provides a generic framework for involving actual customers and other key stakeholders in the collaborative innovation process. It can be considered as a co-creational process that facilitates stakeholder engagement and is based on the concept that organizations instead of utilising only in-house resources could use external ideas to develop their products and services. In all open innovation activities, the partner section plays a significant role. Nowadays, organizations are rarely capable of innovating fully independently and therefore the innovation process has become more and more of a joint organizational effort, instead of an isolated effort of individuals or individual organizations. Importantly, partners within an open innovation network should provide the resources and capabilities which their own organization lacks in order to gain the suggested positive effects of collaborating and additional capabilities.



#### **Iterative co-creation process**

In an iterative development approach, the evaluation and validation of circular economy business models and key innovations evolve through iterative collaboration rounds between cross-functional teams consisting of project partners and external stakeholders. It promotes adaptive planning, evolutionary development, early delivery, continuous improvement, and encourages rapid and flexible response to change.

Co-creation has become a central framework used within many organizations to innovate novel products and services. It is about planning, developing, and innovating new solutions through a specific iterative development process while utilising various methods, techniques and tools. The purpose of co-creation is to create a customer-centric solutions that meets the needs and demands of the customers and fulfils the solution provider's business objectives. Through a co-creation approach, diverse teams together with end-users can collaboratively identify needs, ideas, experiences and opportunities and generate fast prototypes to be tested and validated by the real users and other relevant stakeholder.

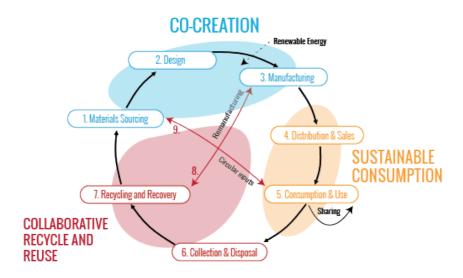
#### Validation and evaluation in co-creative manner

The main objective of the Innovation Camp is to evaluate and validate circular economy business models and the key innovations. Therefore, the contributions during the camp will have a direct impact for the reporting and recommendations in the future circular economy efforts.

**Validation** in the context of CIRC4Life refers to the assurance that developed CEBMs meets the needs of customers and other key stakeholders. Validation involves stakeholder acceptance and suitability of the business models for circular transition. The key question in CEBM validation is: **whether or not a CEBM is appropriate for its purpose of helping companies in circular transition.** 

**Evaluation** refers to the degree of acceptance and usability of the business models. Evaluation takes into account CEBM novelty/innovativeness, circularity, business and market potential, and replicability across industries. The key question in CEBM evaluation is: how well CEBM addresses its purpose of helping companies in circular transition.

In the co-creative spirit of Innovation Camp both validation and evaluation will be based on individual inputs of participants, and on group consensus, taking into account different stakeholders' perspective (industry, academia, public sector and users/consumers).



#### 3. Innovation Camp key topics and objectives

#### **Overview**

During the camp we will focus on evaluating and validating three <u>circular economy</u> <u>business models (CEBMs)</u>, including (A) co-creation of product and services, (B) sustainable consumption and (C) collaborative recycling and reuse. Insights from <u>CIRC4Life</u> <u>Demonstrators</u> will serve as case studies for the implementation of the CEBMs.

We highly encourage you to get familiar with the project's <u>website</u> and public<u>deliverables</u> prior the Camp!

#### **Circular Economy Business Models (CEBMs) in brief**

The following three Circular Economy Business Models (CEBMs) will be validated and evaluated during the Innovation Camp:

- Co-creation of Products and Services (CEBM a)
- Sustainable Consumption (CEBM b)
- Collaborative Recycling/Reuse (CEBM c)



#### **Co-creation of Products and Services:**

This business model helps to bring end-users closer to design and production stages using user-centric methods. Benefiting from the co-creation features, sets of sustainable production methods have been implemented and new products/services have been be created. The key innovation of this CEBM are the <a href="eco-cost method">eco-cost method</a>, use of online LCA, and <a href="eco-cost method">a decision-making and impact assessment tool</a> for the value chain actors.

Does co-creation at the early stage of product development enhance circularity and create sustainable business?



#### **Sustainable Consumption:**

By presenting the customer with options and the right methodology to assess the environmental impact of products, this model enables the consumer to make a more sustainable decision. The model also provides a traceability solution to monitor a product's sustainability along the value chain and supports end-users and stakeholders to actively implement the circular economy via awareness raising and knowledge sharing activities. The key innovations of this CEBM are the <u>CIRC4Life consumer app</u>, the eco-label, the <u>traceability module</u>, and the <u>consumer awareness raising and capacity building activities.</u>

Does the CEBM have the potential to create behavioural changes in consumers towards more sustainable choices?



This model is based on a user-friendly waste collection system. It includes a system for stakeholders to interact with each other to facilitate the use/reuse of end-of-life products and reduce waste, and implements an <u>eco-credits awarding scheme</u> to encourage people to recycle/reuse. The key innovations of the CEBM are the <u>ICT based reuse/recycling system</u>; an eco-credit/eco-cost based consumer app; incentive schemes for reducing, reusing and recycling; and awareness activities.

Does the CEBM help to close the loop and improve waste management?



#### 4. Innovation Camp Agenda

The agenda can be found at CIRC4Life <u>webpages</u>, minor changes might occur. In the following pages you will find detailed agenda with Zoom links for both days.



#### Thursday 27th May

17:00-18:00 Virtual get together

We welcome all Camp participants to get to know each other in a semi-formal virtual event. The event includes a short introduction to the Howspace co-creation platform.

Zoom-link for the Virtual get-together



# 9:30-10:30 10:30-10:40 10:40-10:45 10:44-11:30

#### CIRC4Life project and Innovation Camp introduction

Zoom-link for introduction event and workshops

Welcome and opening words

Julia Nevmerzhitskaya, Open Innovation Host, Laurea University of Applied Sciences,

CIRC4Life approach to CEBMs

Dr. Daizhong Su, CIRC4Life project Coordinator, Nottingham Trent University; UK

Key insights from the demonstrators

Hanna Nilsson-Lindén and Karin Wilson, RISE Research Institutes of Sweden

Keynote: Designing Successful Circular Business Models

Erwan Mouazan, Circular Economy Researcher, Creative Sustainability Consultant,

Director of Ecovala, Finland

#### **Break**

#### Introduction to the co-creation workshop

Jaakko Hannula, Laurea University of Applied Sciences

Open Innovation Camp lead facilitator Jaakko Hannula will introduce the workshop structure and goals

#### **CEBM** presentations

The CEBM owners will give a presentation of their CEBM and related key solutions

After each presentation all the participants will vote on three validating questions concerning the presented CEBM  $\,$ 



The Co-creation of Products and Services model

Dr. You Wu, Nottingham Trent University



The Sustainable Consumption model Lahila de Sola, ALIA



**The Collaborative Recycling and Reuse model** Fernando Círez Oto, CIRCE Foundation

11:30- 12:05	The participants will be three CEBM home subgroups  During the workshop the participants will present critical and encouraging comments and questions to the CEBM owner  After the questions and comments the participants will vote and comment to evaluate the success of the CEBM  The Co-creation of Products and Services model  The Sustainable Consumption model  The Collaborative Recycling and Reuse model		
12:05- 12:20	Coffee Break		
12:20- 12:50	Presentation of workshop 1 results Facilitators present the results of workshop 1 in the main lobby		
12:50- 13:10	The CEBM home group members will be mixed together to form three new groups to discuss interconnections between the CEBMs and to provide new comments to the CEBM owner in a facilitated discussion  The Co-creation of Products and Services model  The Sustainable Consumption model  The Collaborative Recycling and Reuse model		
13:10- 13:30	Presentation of results and voting  The facilitators present the results of workshop 2 and the participants vote again to validate and evaluate each CEBM		

13:30- 14:15	Lunch Break			
14:15- 15:15	Future directions and market opportunities  Moderated discussion led by Tim Bartram, Senior Manager Collaborative Research Projects, and Sarah Leick, Manager Competence Center Sustainability, GS1 Germany GmbH			
15:15- 15:30	Circular Economy funding opportunities in Horizon Europe  Hans-Christian Eberl, Policy Officer at European Commission			
15:30- 16:00	Grand OIC closing and virtual raise the glass  Time to celebrate together! Opportunity for participants to network and plan further collaboration opportunities, provide us feedback on the Camp, or simply stay online and raise a glass for the successful Open Innovation Camp.			
	Thematic rooms open for collaboration and discussion - open access:			
- 17:00	The Co-creation of Products and Services https://laurea.zoom.us/j/64554134496  The Sustainable Consumption https://laurea.zoom.us/j/63161122209  The Collaborative Recycling and Reuse https://laurea.zoom.us/j/69364795767			



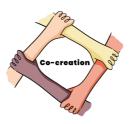
#### **Participants and working groups**

All experts are divided into three so called "home working groups", corresponding to three CEBMs. Each home working group has an owner, who thematically champions the Circular Economy Business Model (CEBM) Working group. Owners are also responsible for delivering all the background information and materials relating their working group activities.

#### **Circular Economy Business Model (CEBM) owners**

GROUP NAME		OWNER	ORGANIZATION	
СЕВМ А	The Co-creation of Products and Services model	You Wu	Nottingham Trent University	UK
СЕВМ В	The Sustainable Consumption model	Lahila de Sola	ALIA	Spain
СЕВМС	The Collaborative Recycling and Reuse model	Fernando Círez Oto	Centre of Research for Energy Resources and Consumption (CIRCE)	Spain

#### Home-groups







#### **CEBM A**

Su Daizhong Hanna Lindén Hua Huang **Jonathan** Smith Joshua Whitehead-Davies

Ма Ming Shuyi Wang Sten-Erik Björling Teemu Santonen Torun Hammar Wenjie Peng WenTao Kuang You Wu Zijian Chai

Ajay Kumar Anna Desogus Eline Boon **Enrique** Moliner **Florian** Andrews Henry Varga **Ibrahim** Muritala Dimov Rosen Sibusiso Gamede

## CEBM B

Anabel Cano **Angelos** Stamou Beata Eva Ledroit Janusz Krupanek Juan Costa **Juan Carlos** Segura Lahila De Sola Manuel Moreno Monica Alessi Paola Trona Peter Bökmark Peter Uhlig Tim Bartram

Gerhard Kerschbaumer **Imad Antoine** Ibrahim Elegbede Isa Santiago Torrubia Ivan Kati Tawast Olalla Michelena Olga Kudryavtseva **Piyush** Dhawan **Simona** Grande

#### CEBM C

Behrend Joanna **Evaristo** García **Fernando** Cirez Georg Schwering Goio Borge Gonzalo Torralbo Julie Bryhn Karin Wilson Lekawska-Andrinopoulou Lucyna Maider Arieta-araunabeña Sarah Leick Sebastian Schmittner Sonia Ascaso **Vasileios** Rizos

**Andro** 

Goblon Claudia Kuss-Tenzer **Didier** Helal Petocchi Franco Jose Antonio Alonso Natālija Cudečka-Purina Nikolai Mevissen Santiago Cuesta-Lopez Uli Schulze Suedhoff



### Facilitators and organizers

Each CEBM working group will have designated facilitators from Laurea University of Applied Sciences (Finland), who is responsible for facilitating and managing their group's co-creation process according to pre-defined innovation camp plan.

Name	Role	<b>CEBM</b> group
Hannula, Jaakko	Host, Main Facilitator	CEBMA
Cozma, Andreea	Facilitator	CEBMA
Virolainen, Zheng	Facilitator	CEBMA
Hardén, Tomi	Facilitator	CEBM B
Lähdeoja, Satu	Facilitator	CEBM B
Peltola, Sara	Facilitator	CEBM B
Mäkäräinen, Sara	Facilitator	CEBMC
Päällysaho, Minna	Facilitator	CEBM C
Abdrabo, Tarek	Facilitator	CEBM C
Nevmerzhitskaya, Julia	Organizer, Host	
Purola, Aletta	Organizer, Technical support	





### **Participant list**

#### **CIRC4Life Consortium partners**

Last name	First name	Organization	Country
Alessi	Monica	Centre for European Policy Studies	Belgium
Arieta-araunabeña	Maider	Indumetal Recycling S.A.	Spain
Ascaso	Sonia	CIRCE Foundation	Spain
Bartram	Tim	GS1 Germany	Germany
Behrend	Joanna	GS1 Germany	Germany
Björling	Sten-Erik	Enviro Data	Sweden
Bökmark	Peter	RISE Research Institutes of Sweden	Sweden
Borge	Goio	Indumetal Recycling S.A.	Spain
Bryhn	Julie	Centre for European Policy Studies	Belgium
Cano	Anabel	ONA	Spain
Cirez	Fernando	CIRCE Foundation	Spain
Costa	Juan	ONA	Spain
De Sola	Lahila	ALIA	Spain
García	Evaristo	RECYCLIA	Spain
Hammar	Torun	RISE Research Institutes of Sweden	Sweden
Hannula	Jaakko		Finland
		Laurea University of Applied Sciences	
Huang	Hua	Nottingham Trent University	UK
Kuang	WenTao	Kosnic	UK
Ledroit	Eva	Make Mothers Matter	Belgium
Leick	Sarah	GS1 Germany	Germany
Lekawska-Andrino-	Lucyna	The Institute of Communications and	Greece
poulou		Computer Systems	
Lindén	Hanna	RISE Research Institutes of Sweden	Sweden
Ма	Ming	Kosnic	UK
Moreno	Manuel	ALIA	Spain
Nevmerzhitskaya	Julia	Laurea University of Applied Sciences	Finland
Purola	Aletta	Laurea University of Applied Sciences	Finland
Rizos	Vasileios	Centre for European Policy Studies	Belgium
Santonen	Teemu	Laurea University of Applied Sciences	Finland



## Participant list

#### **CIRC4Life Consortium partners**

Last name	First name	Organization	Country
Schmittner	Sebastian	The European EPC Competence Center	Germany
Schwering	Georg	The European EPC Competence Center	Germany
Segura	Juan Carlos	ALIA	Spain
Wang	Shuyi	Nottingham Trent University	UK
Smith	Jonathan	Scilly Organics	UK
Stamou	Angelos	The Institute of Communications and Computer	Greece
		Systems	
Su	Daizhong	Nottingham Trent University	UK
Torralbo	Gonzalo	REC	Spain
Trona	Paola	MMM	Belgium
Peng	Wenjie	Nottingham Trent University	UK
Whitehead-Davies	Joshua	Kosnic	UK
Wilson	Karin	RISE Research Institutes of Sweden	Sweden
Wu	You	Nottingham Trent University	UK
Chai	Zijian	Nottingham Trent University	UK
Michaliszyn-Gabryś	Beata	IEIA	Poland
Krupanek	Janusz	IEIA	Poland



## Participant list

#### **External Circular Economy Experts**

Last name	First name	Organization	Country
Alonso	Jose Antonio	Recicla y Gana S.L.	Spain
Andrews	Florian	Grüner Hering - Agentur für Circular Economy	Germany
Boon	Eline	Federal minister for EU Green deal	Belgium
Cudečka-Puriņa	Natālija	Ministry of Environmental Protection and Re-	Latvia
		gional Development	
Cuesta-Lopez	Santiago	ICAMCYL and ISMC Cluster	Spain
Desogus	Anna	Circular Together	Poland
Dhawan	Piyush	The Circular Collective	India
Dias	Albertina	Universidade Atlantica	Portugal
Dimov	Rosen	PhaseGrowth OÜ	Estonia
Elegbede	Isa	Bradenburg university of technology	Germany
Gamede	Sibusiso	Kampala International University	Uganda
Goblon	Andro	Construction Cluster of Slovenia	Slovenia
Grande	Simona	University of Turin	Italy
Helal	Didier	ORBIWISE	France
Ibrahim	Imad Antoine	Qataruniversity	Qatar
Kerschbaumer	Gerhard	Accirculate SPRL	Austria
Kudryavtseva	Olga	Lomonosov Moscow State University	Russia
Kumar	Ajay	Central University of Kerala	India
Kuss-Tenzer	Claudia	Sustainability Network for Standardisation	UK
Mevissen	Nikolai	CM Umwelt GmbH	Germany
Michelena	Olalla	Octagono partners	Belgium
Moliner	Enrique	LOMARTOV	Spain
Muritala	Ibrahim	DLR	Germany
Petocchi	Franco	Accirculate SPRL	Belgium
Santiago Torrubia	Ivan	Ecovending	Spain
Tawast	Kati	Laurea University of Applied Sciences	Finland
Schulze Suedhoff	Uli	Southampton University	Belgium
Varga	Henry	iCircle Consulting	Netherlands













