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# Exploring Alternatives to Food Waste with Never-ending Stories for Circular Economy

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## 1. Workshop Organizer/s

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## Abstract

This workshop introduces the Story Intervention Method (SIM) that uses storytelling tools and techniques to help designers with problem framing at the initial stages of design process. The purpose of the workshop is to explore the potentials of SIM in articulating never-ending stories for Circular Economy, on the theme of local food waste elimination. During the workshop, participants will be constructing narratives of food waste, identify intervention points and construct new, never-ending narratives eliminating food waste to provide design directions. Participation is open to researchers, practitioners and graduate students from any design background, who is interested in exploring Circular Economy material flows through the utilization of a novel method (i.e. SIM). At the end of the workshop, participants will have a better understanding of the role storytelling can play in the circular design process, how it can be used as a tool to analyse material flows, to rethink established conceptions and to discover new solution areas.

## 2. Context of Workshop

Storytelling is a prominent topic in design, as design researchers and practitioners discover its effectiveness in not only communicating ideas but understanding human behaviour, motivation and interactions. This workshop builds upon organizers' previous research on Story Intervention Method (SIM) that uses storytelling tools and techniques to help designers with problem framing at the initial stages of design process. SIM aims to help designers capture potential narratives by considering all involved characters, the setting(s) they are in, the conflict they face, and the way they resolve it, and define intervention points to create alternative conclusions of the existing narrative. In the case of Circular Economy and Design, the current narratives end with different kinds of waste, and the alternative narratives should present never-ending, circular material flows.

The challenge of Circular Design lies within the kind of materials (i.e. biological and technical), products and services required, and the collaboration of their stakeholders. The latter is problematic in the sense that, in design practice, the relationship among these stakeholders throughout the design, production, use and post-use of products are rarely mapped as narratives with each stakeholder affecting and being affected by others to ultimately reach a negative conclusion (i.e. waste) or a set of positive loops (e.g. cascades, reuse, refurbish, recycle, etc). Not mapping these relations as the narratives that they are can lead to miscomprehension of the problem area, underappreciation of the potentials the involved stakeholders present, or inability to develop relatable design solutions. Through understanding the narrative behind these processes, designers can identify problematic areas and possible interventions to later develop innovative, circular design solutions. The potential of SIM for Circular Design was observed in Circular Design Internship in University of Limerick, where the method was introduced to interns for design research analysis. Following this initial implementation, we now aim to explore the potential of SIM in a more structured workshop in DRS2018.

The workshop theme will be *Local Food Waste Elimination and Reuse for Pastry/Bakery Products*. The participants will be asked to create a narrative during the workshop and define intervention points and alternative narratives leading to a never-ending story for circular economy on eliminating food waste. Although food waste is a widely discussed problem with many layers and involving different stakeholders, it is also a relatable problem area that can be easily explored by participants.

## 3. Planned Activities and Expected Outcomes

The workshop consists of one preliminary study and three phases during the workshop.

Phase 0: Understanding the Stakeholders (Preliminary Study): Before the workshop, participants will be asked to talk to a stakeholder (i.e. producer, distributor, user) of a pastry/bakery related material flow that ends in waste. We will provide the participants with a list of questions to ask to the stakeholders and a WWWWWH (Who, What, Where, When, Why and How) worksheet to keep records of their conversations with these

stakeholders. In addition, the organizers of the workshop will also undertake this preliminary study and share their findings during the workshop to ensure that stories for every stakeholder are present during the workshop.

Phase 1: Sharing Findings and Illustrating Potential Narratives: (60 min): After a brief introduction to the workshop topic and definition of key storytelling concepts, participants are going to share their findings/stories regarding the stakeholders of pastry/bakery material flows with other team members by explaining the *setting (where, when)*, the *characters (who)*, the *plot (what)*, the *conflict (why)* they faced and how they *resolved it (how)*. Then, each group will create a narrative based on their discussions of these findings. The expected outcome of this phase is four different narratives in the form of written and/or drawn descriptions.

Phase 2: Defining Intervention Points and Creating Never-Ending Stories for Circular Design (90 min): Participants are required to identify and visualize at least three problem areas on which they think they can have an impact. As a guide we will show them two techniques for visualization of problem areas and intervention points. The expected outcome of this phase is four different visual narratives identifying the impact areas and intervention points for '*Local Food Waste Elimination and Reuse for Pastry/Bakery Products*'.

Phase 3: Closure and Discussion (30 min): In this phase, after each group presented its narrative, there will be an informal discussion in which we will ask participants about their experience of using the technique, their insights on the potentials of SIM for Circular Design and their recommendations for improvements.

At the end of the workshop, participants will have a better understanding of the role storytelling can play in the circular design process, how it can be used as a tool to analyse material flows, to rethink established conceptions and to discover new solution areas.

## **4. Intended Audience**

The workshop is intended for researchers, practitioners and graduate students from various design fields including industrial design, interior design, interaction design, communication design, graphic design and service design, who are interested in analysing circular economy material flows and devising never-ending stories for circular economy. Ideal number of participants is 12, which will be divided into four groups.

## **5. Length of Workshop**

The workshop will be a 3,5 hour, half-day workshop. The duration of its three phases will be: 1) sharing findings and illustrating potential narratives: 60 mins, 2) defining intervention points and creating never-ending stories: 90 mins, and 3) closure and discussion: 30 mins. There will be 10-minute breaks between each phase.

## 6. Space and Equipment Required

A studio space, 15 chairs, 4 tables, a projector, a white board, bunch of A3 (or larger) size white paper, coloured pencils, board markers, post-it notes

## 7. Potential Outputs

This workshop builds upon previous research on Story Intervention Method (SIM) and aims to explore its potential for Circular Design. The outcomes of this workshop will help further develop SIM and both the method and the outcomes will be shared with the design community to showcase its implications for Circular Economy.

About the Organizers:

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