Detailed PhD subject

**University:** Université de Technologie de Troyes  
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**PhD title:** Challenges and opportunities for the design and development of future and inclusive platforms supporting the collaborative economy

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**Context**

**COST Action CA16121 - From Sharing to Caring: Examining Socio-Technical Aspects of the Collaborative Economy**

This PhD will take place in the framework of the “Sharing and Caring” COST Action, which is aimed at creating a multi-national network of participants examining the nature, practices, issues and technological challenges relating to the collaborative economy, in order to gain a deeper and more nuanced shared understanding of the phenomenon.

**Position Statement**

We adopt the term ‘collaborative economy’ (Bauwens et al, 2012), as it stresses both the economic aspects of the phenomenon and the collaborative relations that are being established among peers and other stakeholders.

We are focusing on the socio-technical aspects of the collaborative economy, through a practice-focused approach - a qualitative and constructivist approach anchoring technology design in social practice (Wulf et al. 2015).

**Related Work**

The emergence of the collaborative economy has been enabled by the technical infrastructures relying on web and mobile technologies, the availability of unutilised or underutilised goods and resources, as well as socio-economic drivers to capitalize on such resources and experiment with new labour opportunities. Collaborative economy offers considerable potential for supporting new modes of (peer-to-peer) exchange by fostering trust among strangers with the help of technologies, such as reputation and payment systems (see e.g. Ikkala & Lampinen, 2015; Teodoro et al, 2014). One potential innovation of platforms is the capability to potentially reallocate wealth across the ‘value chain’, specifically away from middlemen and towards small producers and consumers (Schor and Fitzmaurice, 2015). This somewhat optimistic view of connected consumption is in stark contrast with calls for more equitable forms of organizing platform labour, such as cooperatives and other social enterprises, and critiques of the emotional labour, body labour, and temporal labour that work under platform capitalism involves (Raval & Dourish, 2016).

Existing research on the collaborative economy from a socio-technical perspective has mainly examined specific platforms or subdomains, such as food sharing (Ganglbauer et al, 2014), time banking (Bellotti et al, 2013), and local online exchange (Suhonen et al, 2010; Lampinen et al, 2015),
as well as network hospitality (Bialski, 2012; Ikkala & Lampinen, 2015), on-demand labour (Teodoro et al, 2014), and crowdfunding (Gerber et al. 2014, Bellotti et al. 2015).

Some of the concerns surrounding the collaborative economy have to do with the lack of regulations and quality standards, the perceived risks, as well as cultural factors. There has been an increasing emphasis on considering platforms as sites of work and labour, and scholars have brought up concerns relating to workers’ rights and the conditions under which platform capitalism can allow for making a living (Teodoro et al, 2014; Raval & Dourish, 2016). The framing of these platform-mediated activities as ‘sharing’ and exchange among peers has been another source of controversy: What counts as sharing? Does it make sense to consider activities that involve monetary transactions as sharing? What are the bounds of role differentiation within which we can still meaningfully talk about peer-to-peer activity? The seeming contradiction of fostering genuine community connections while maintaining room for commercial activity and monetized exchange has been at the heart of a lot of the debate regarding platforms and ‘sharing’ (Barta & Neff, 2015).

Exchange platforms have also provoked controversy around whether ‘sharing’ a particular resource benefits those involved, harms others, simply subverts legislation – or accomplishes a mix of these in a way that produces both winners and losers. Research has also turned to examine the negative implications and exclusion generated by some of the manifestations of the collaborative economy, such as discrimination, reinforced societal inclusion and challenges that prevent disadvantaged groups (e.g. low socioeconomic status, un(der)employed and/or users from emerging regions) from receiving some of the benefits (e.g. Dillahunt & Malone 2015, Ikkala & Lampinen, 2015).

Recent developments connect the discussion on specific aspects of the sharing economy with issues such as the future of work, collaboration, trust, and coordination of peer-to-peer activities (Lampinen et al. 2015, Dillahunt et al 2016, Lampinen et al. 2016). Research on the collaborative economy connects with longstanding concerns in this domain, specifically with issues regarding work, collaboration, and trust. A recent workshop began to explore the research opportunities these developments entail for CSCW (Lampinen et al, 2016): with platform economies, work is taking on new forms.

The collaborative economy challenges scholars to revisit workplace studies and consider how to best approach work and collaborative technologies in circumstances that are often characterized as flexible yet precarious, mobile, time-sensitive, algorithmically mediated, and lacking a traditional sense of “workplace” or “coworkers”. Moreover, there are many questions to consider when it comes to exchange, work, and interaction that is mediated through current and emerging platforms: What does collaboration mean in this context? Who collaborates with whom? How is collaboration currently designed for (if at all) in these platforms? What might alternative approaches look like? Finally, when it comes to peer-to-peer exchange and platform-mediated forms of work, the roles of trust, reputation, and related metrics are central topics to consider.

Objectives
The objective of this PhD is to understand the technical platforms and infrastructures upon which the collaborative economy is built. The overarching objective is to understand the challenges and opportunities for the design and development of future and inclusive platforms. To achieve this goal, this PhD will rely upon the set of case studies collected by members of the COST action, focusing on the technical features and infrastructures that support the collaborative practices and community
aggregation. Indeed, the PhD will produce a synthesis of the mechanisms that are technically available in relation to their effects on collaboration and economic relation. They will be studied not only in their positive support to collaboration but also in their constraints and limitations, observing how people practically overcome such limitations.

References


