University of Cologne
Faculty of Management, Economics and Social Sciences
Information Systems Area

Selected Issues in Information Systems
Digital Community Currencies

Term: Summer 2021

Chair for Information Systems and Systems Engineering (Vertr.-Prof. Dr. Chasin)

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The Phenomenon of (Digital) Community Currencies

The demand for underutilized physical resources as well as unemployed and underemployed human resources creates opportunities for innovations. For instance, in Indonesia, passengers who cannot afford a public bus ride have an option to pay with the plastic waste they collect (Soeriaatmadja, 2018). The economic exchange, in this case, represents a substitute for what research calls community currencies (Seyfang & Longhurst, 2013). Community currencies are alternative currencies created for the purpose of strengthening the local economy of a community. While not aiming at replacing national currencies, they enable economic transactions with local resources for local needs. Simply put, community currencies represent "local 'money' that is only useable within a neighborhood or town" (Soeriaatmadja, 2018). The "Chiemgauer" (Cato & Suárez, 2012; Thiel, 2011) project with 3,500 participating individuals and 500 businesses is a prime example of a community currency. To conduct transactions, Chiemgauer community members can exchange Euro into an alternative currency ("Chiemgauer Regiogeld") and use it for conducting transactions like buying products and paying for services. Even during and after the financial crises in 2008, the Chiemgauer project was reporting on the currency's positive impact on the community, including enforcing regional economic flows and cooperation, increasing the sense of belonging to a community, reducing emissions of transport, and providing economic resilience for the community through reduced levels of high-risk financial speculation (Galleri, 2019).

The phenomenon of community currencies has a long history, is currently applied in many countries, and has been studied by economists and sociologists worldwide. Most research has been carried out outside the digital space as community currencies were traditionally printed and circulated the communities in the form of paper bills. With the advent of the digital age, Digital Community Currencies (DCCs) create opportunities for addressing challenges that traditional community currencies face, such as the inconvenience of handling two currencies in one wallet and the lack of reusability for community currency platforms. This seminar

explores the phenomenon of digital community currencies by analyzing and interviewing community currency projects, as well as tapping into the academic discourse on the phenomenon. The seminar's goal is to equip students with the knowledge required for establishing resilient and reusable DCC platforms and developing the corresponding IT solutions.

Background

The discourse on digital community currencies falls in the context of a larger discourse on sustainability. Addressing the grand challenge of sustainability implies tackling issues across its three dimensions: economic, ecological, and social (Watson et al., 2010). While acknowledging each of these dimensions' importance, the academic focus has been so far on the ecological environment (see Malhotra et al., 2013; vom Brocke et al., 2013). The opportunities for IT to become part of a solution for societal challenges such as poverty, hunger, and unemployment are not yet explored exhaustively. Against this background, community currencies their digital counterparts can positively impact issues like reducing inequality and social exclusion, supporting small and medium-sized enterprises, and democratizing services and organizations (CCIA, 2015). In this seminar, we assume Berniker's (2017) guiding vision for digital community currencies as a pillar for tomorrow's resilient and sustainable communities.

Fundamentals on Scientific Work

The students learn the fundamentals of scientific work via the *Flipped Classroom on Scientific Work*. A separate registration (and preparation) is necessary:

- https://www.ilias.uni-koeln.de/ilias/goto_uk_fold_2445676.html

Students are exempted if they have already attended the classroom session of the *Flipped Classroom on Scientific Work* in the context of another course. If this is the case, students should contact fc@ercis.de beforehand, providing the course name and semester in which the classroom session on scientific work has been accomplished.

For more information, please visit:

- https://wirtschaftsinformatik.uni-koeln.de/en/studies/theses/scientific-work

Goals

- Understand the DCC phenomenon
- Learn the basics of the qualitative data analysis
- Improve your skills in conducting and writing up research (preparation for master's thesis)
- Improve skills in the synthesis and aggregation of (research) results
- Strengthen your teamwork skills
- Improve your ability to communicate research results

Content

- Digital community currencies (DCC)
- Positioning of DCC within the sustainability discourse
- Types of DCCs
- DCC advantages and affordances
- Distributions of DCCs
- Challenges of DCCs
- DCC best practices

Timeline

Date	Event	Time/Place
06.04	Online session on Scientific Work (not necessary if you have attended before)	Online 11:00-17:00
14.04	Kick-off; organization; sustainability from the DCC perspective	Online 12:00-14:00
20.04	Economic unsustainability 1	Online 12:00-14:00
21.04	Economic unsustainability 2	Online 12:00-14:00
28.04	Digital Community Currencies	Online 12:00-14:00
05.05	Topics/interview distribution and discussion	Online 12:00-14:00
12.05	Assignment iteration 1 (obligatory presentation of intermediary results and discussions)	Online 12:00-14:00
19.05	Assignment iteration 2 (obligatory presentation of intermediary results and discussions)	Online 12:00-14:00
02.06	Assignment iteration 3 (obligatory presentation of intermediary results and discussions)	Online 12:00-14:00
23.06	Submission of assignments one and two	EOD
07.07	Submission of assignments three	EOD
20.07	Final presentations	Online 09:00-10:30 & 11:00-12:30 & 13:00-14:30 & 14:30-16:00

Course Grading

The grading is performed based on the assignments. Instead of one comprehensive assignment, the students prepare three smaller assignments that are graded individually. All insights gathered in the seminar are synthesized in a final document. Groups of students will be formed to facilitate teamwork and improve the quality of the results.

- **Assignment 1: Short seminar paper** (40%) – you prepare a short research paper on one of the DCC sub-topics.
- **Assignment 2: Qualitative data analysis** (20%) – The seminar participants receive interview data collected during interviews with the managers of digital community platforms. Based on the transcribed interviews, you perform a qualitative data analysis focusing on identifying and coding best practices associated with community currencies.
- **Assignment 3: Report** (20%) – using the results from assignments one and two, you create a concise report on the issues covered in the assignments.
- **Presentation of the assignment 1** (20%) – you present the content of the report in a final presentation.

References

Berniker, E. (2017). *Only a Ten Hour Week - Architecture for a Sustainable Society of Plenty*. CreateSpace Independent Publishing Platform.

Cato, M. S., & Suárez, M. (2012). Stroud Pound: A Local Currency to Map, Measure and Strengthen the Local Economy. *International Journal of Community Currency Research*, *16*, 106–115.

CCIA. (2015). *People Powered Money - Designing, developing & delivering community currencies*. New Economics Foundation.

Galleri, C. (2019). *Der Chiemgauer in der Praxis*. https://www.chiemgauer.info/fileadmin/user_upload/Basisinfo/Chiemgauer_praktisch.pdf

Malhotra, A., Melville, N., & Watson, R. (2013). Spurring Impactful Research on Information Systems for Environmental Sustainability. *MIS Quarterly*, *37*(4), 1265–1274. http://www.misq.org/misq/downloads/download/editorial/587/

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Soeriaatmadja, W. (2018). Used Plastic Water Bottles a Ticket to Bus Ride in Surabaya. *The Straitstimes*. https://www.straitstimes.com/asia/se-asia/used-plastic-water-bottles-a-ticket-to-bus-ride

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Watson, R., Boudreau, M., & Chen, A. (2010). Information Systems and Environmentally Sustainable Development: Energy Informatics and New Directions for the IS Community. *MIS Quarterly*, *34*(1), 23–38.