## **Repair.me - a case-study on encouraging circular** economy through connections of individuals and repair shops

**Tsvetelin Kostadinov** Sofia University s@gmail.com

Tobias Jordan TU Wien tsvetelinkostadinovt e11902127@student.tu wien.ac.at

Ana Škarica University of Zagreb. Faculty of organization and informatics askarica20@student.f oi.hr

Catalina Stancu Politehnica University of **Bucharest** catalina.stancu@stud .faima.upb.ro

Abstract. As resources become scarcer and prices rise, the transition to a circular economy [1] becomes inevitable [2]. Shorter product life cycles and planned obsolescence lead to higher consumption of products such as electronic devices, household appliances, accessories, clothes and furniture. Repairing products instead of replacing them is time-consuming and requires more effort on the customer side [3]. Meanwhile, existing repair shops struggle to grow their businesses and need to rely on regular customers. The goal of this paper is to explore a particular application of digital platforms in the context of household object repair, which aims to encourage participation in the circular economy. Expected benefits include lower customers costs (repairing instead of buying), increased awareness of individual repair shops and a boost in the local economy. This paper investigates the application of REPAIR.ME - a platform [4] connecting consumers to small and medium repair shops in order to increase awareness and to encourage repairing instead of purchasing. Moreover, the paper will highlight potential business processes which could be part of operating such a company, ways the company could be self-sufficient and methods to capture users and convice them to partake in the circular economy facilitated by REPAIR. ME [5]. The aim of the platform is to make the repair process of appliances as convenient as possible through a streamlined processes, providing a friendly user interface and a variety of quality of life features. The paper aims to highlight the structure and operation of the proposed platform from different key perspectives. The business view will be shown through a business model canvas and value proposition canvas of different customer segments, while the customer view will be described through personas. Additionally, key processes will be shown using BPMN, while a more holistic view is provided through an ArchiMate model.

Keywords. CECIIS, conference poster, digital platform, circular economy, repair solutions, platform

## References

[1] Julian Kirchherr, Denise Reike, and Marko Hekkert. "Conceptualizing the circular economy: An analysis of 114 definitions". In: Resources, conservation and recycling 127 (2017), pp. 221-232.

[2] Kris Hartley, Ralf van Santen, and Julian Kirchherr. "Policies for transitioning towards a circular economy: Expectations from the European Union (EU)". In: Resources, Conservation and Recycling 155 (2020), p. 104634. ISSN: 0921-3449. DOI: https://doi.org/10.1016/ j. resconrec . 2019 . 104634. URL: https : // www.sciencedirect.com/science/ article/pii/S0921344919305403.

[3] Tamar Makov and Colin Fitzpatrick. "Is repairability enough? big data insights into smartphone obsolescence and consumer interest in repair". In: Journal of Cleaner Production 313 (2021), p. 127561.

[4] Daniel Rohn et al. "Digital platform-based business models-An exploration of critical success factors". In: Journal of Engineering and Technology Management 60 (2021), p. 101625.

[5] Juho Hamari, Jonna Koivisto, and Harri Sarsa. "Does gamification work?-a literature review of empirical studies on gamification". In: 2014 47th Hawaii international conference on system sciences. Ieee. 2014, pp. 3025-3034.