

UNIVERSITY OF VIRGINIA MARKETPLACE WEB PLATFORM

COLLABORATIVE CONSUMPTION, SOCIAL COHESION, AND EMPOWERMENT

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By

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SOCIOTECHNICAL SYNTHESIS

With the deep understanding aided by meaningful intension, technological advancements could bring forth numerous benefits to society. The technical research portion of the thesis undertakes implementing a web platform on which the University of Virginia students, staff, and faculty can buy, sell, or trade used items. Though on a surface level, the goal of the project is to fill the inefficiency in the market on Grounds, on a deeper level, the project intends on empowering consumers. The STS portion of the thesis undertakes research on the topic of peer-to-peer services, or also known as collaborative consumption. The emergence of this new technological advancement called for understanding its role in the society to determine its explicit and implicit impacts. Encompassing the same topic, the two endeavors are tightly coupled as the technical project tackles the question of collaborative consumption's role in society in a more experimental manner whereas the STS research project uncovers it more analytically and deductively.

Originally, our technical group of three noticed an inefficiency in the second hand market on Grounds, which propelled us to examine existing practices and their shortcomings. Although sites like Craigslist and Facebook offer opportunities for individuals to buy and sell used items, we observed that a number of students steered away from such practices. We presumed that the inefficiency emanated from lack of user empowerment and resulted in increased waste problem as students resorted to throwing away their used items at the end of each term. In order to tackle this challenge, our group decided to develop a better solution in the form of a peer-to-peer online marketplace platform. Such venture, first, required investigation into existing concerns and needs through user surveys in order to conjure up necessary building blocks and requirements for the project.

The results from the surveys demonstrated that users avoided existing services due to reasons such as laziness and distrust in service. This finding called for a deeper understanding of how and why people voluntarily choose to participate in other prominent peer-to-peer services, such as Uber and Airbnb. Our research into this quandary revealed that the trust in the platform and service is essential through the element of design. Thus, our group decided to implement a reputation system within our platform that would reduce fears of interacting with strangers online. Additionally, the decision to limit the user-base only to those within the University of Virginia was aided by the goal of extending the sense of real-life community onto our platform. Thus, our solution tackles the previously existed hindrances by lowering the entry to barrier and promoting user-friendliness.

The STS topic raises the question of what are the reasons people participate in collaborative consumption and how do these factors influence the impacts of the technology on consumers and society. The original assumption was that because peer-to-peer services are more transparent in the sense that there is no third-party intermediation, consumers participate in collaborative consumption with much more open-mindedness. Thus, they reap the benefits of empowerment and social connections. In order to test the validity of this assumption, an in-depth understanding and analysis of the technology was required, which prompted turning to peer-reviewed research papers and scholarly journal articles.

The findings from the research demonstrate that peer-to-peer services create meaningful connections and these connections enable users to rediscover humanness through personal relationships afforded by trust rather than empty transactions. Some of the reasons users choose to participate in the service are trust in other users, sense of belonging, and ecological sustainability. This reveals that users are not purely motivated by self-interest or convenience

unlike those of other technological advancements. In addition, the creation of new connections correlates to sharing of values, which facilitates social cohesion. Furthermore, collaborative consumption technologies now present themselves as a competitive alternate to existing incumbent firms, which benefits all consumers with lower prices and more options. Thus, technological advancements in peer-to-peer services have the potential and power to empower users and introduce social integration within a community.

Collaborative consumption provides many benefits and seems promising in bringing empowerment to the people and cohesion within the community. Peer-to-peer services leverage technology as a tool to bring about meaningful changes within a community. The findings imply that problems in society can be mitigated through trust and new relations, which collaborative consumption facilitates.

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PROSPECTUS

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