

Thesis Portfolio

Design of a Software Platform for Modernizing Product Discovery in Artisanal Retail
(Technical Report)

Exploring the Potential of Modernization through Technology in Retail
(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

In Fulfillment of the Requirements for the Degree
Bachelor of Science, School of Engineering

Stephen Palathingal
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Department of Computer Science

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Sociotechnical Synthesis

A one page summary of the overall thesis, including the technical and STS parts. If the two are related (even just remotely), provide an integrated narrative to connect them. If they are completely irrelevant, please add “the technical and STS theses are not related” at the end of the section”.

The technical topic encompasses designing and layout of a development plan for a software platform that facilitates product discovery in the retail space. Our platform, Curate, will connect creators of handmade, artisanal goods with local small retailers to sell their unique goods in physical stores. Such creators will gain a brand-new avenue to sell their work, gain recognition, and minimize competition. On the flip side, smaller retailers receive personalized curated collections to increase customer traction for their stores. This relates closely to my STS prospectus, which will be exploring the potential effectiveness of digital technology for business models that traditionally operate in a non-technical fashion. In the prospectus I will also be exploring the relationship between local, retailers and their existing customer base, and how this might transform through various forms of tech modernization. Both the technical project and prospectus involve exploring an area of society that has been heavily impacted by COVID-19, which makes it especially relevant during current times.