Thesis Project Portfolio

A Systems Analysis Approach for Business Optimization: Integrating Technology Development with Data Analytics and Marketing for GolfCask

(Technical Report)

From Legislation to Liquor: The Rise of Whiskey Distilleries in the U.S.

(STS Research Paper)

An Undergraduate Thesis

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> > Alexander McCall

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An important part of the whiskey community is made up of the distilleries that create unique products and often host tasting events. These distilleries provide a space for enthusiasts to meet, taste new whiskeys, learn about the distillation process, engage with experts, and attend events that foster a sense of community. However, over the past 25 years, there has been a significant increase in the number of whiskey distilleries in the United States, making it harder for consumers to navigate the growing variety of options. My capstone project addresses this issue by developing a whiskey recommender system that helps consumers sort through these options by offering personalized suggestions and promoting user engagement.

The platform, GolfCask, differentiates itself from other whiskey databases by focusing on personalization and user interaction. The human element of GolfCask includes individual users, who are golfers, whiskey enthusiasts, and the broader community connected to both. Each user has unique preferences and experiences that shape how they interact with the website. The social dimension comes from the relationships and interactions that develop among users, which is key for creating a sense of belonging and shared identity within the GolfCask community. These human and social aspects work together with the technical side to enhance user engagement and satisfaction.

I'm applying Hughes's theory on how technologies evolve within larger social, economic, and political contexts to help understand how this system fits into the broader whiskey landscape. To conduct my STS research, I analyzed the Bureau of Alcohol, Tobacco, Firearms, and Explosives Certificate of Label Approval (COLA) registry which tracks when distilleries are authorized to legally sell their products. COLAs are an indicator of industry growth, showing when distilleries start marketing their whiskeys. I specifically focused on large jumps in COLA issuances and correlated these with key laws passed in California and New York, two states that have seen significant growth in distilleries despite not being traditionally known for whiskey production. I examined how laws like the Craft Distillers Act, the Farm Distillery Act, and the Craft New York Act helped lower financial and logistical barriers for new distilleries, allowing them to thrive. These distilleries were also able to flourish because of the increased accessibility to direct sales, tasting rooms, and events. This promoted the local aspect of the distillery that appealed to consumers who sought out unique products. Distilleries began to develop customer bases without having to rely on wholesalers or distributors. My STS research will help inform my capstone project by explaining the factors for all the new distilleries and why they have become places for consumers to visit, learn, and engage.