## Transforming the Travel Experience: A Case Study of an Innovative Travel Platform Vroom

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Abstract. Traveling is a big part of everyone's life, yet it remains underrepresented in the digital market. Especially throughout Europe, travel quickly becomes complicated as crossing borders necessitates a convoluted search for information about motorway infrastructure, rules, and pay conditions as well as bringing issues with different languages.

This paper explores how the platform Vroom is transforming the travel experience in the European Union by making it possible to manage tolls, vignettes, and road fines of all member states in one centralized application. In addition, it aims to show how such an application can offer emergency road services by interfacing with service providers in the area, thus lessening the impact of language barriers when suffering a breakdown abroad. In this way, the envisioned platform introduces innovative features and functionalities inspired by the need for unification of existing road applications and services on the national level, enhancing and expanding upon them to meet a multiplicity of user needs.

This case study shows in what ways a centralized travel platform can help users to plan and realize trips easily from home, how it can improve travel experience, make it more secure, and optimize costs while also offering benefits to the EU as a whole. Moreover, we will present a viable business model for providing these services by providing key artefacts pertaining to various aspects of the project generated through the use of various tools and techniques. These include design prototypes using Figma, architectural frameworks made with Archi, and proposed project timelines visualized through Gantt charts. Additionally, we will employ business modelling techniques such as business model and value proposition canvases, use case diagrams, and customer personas and journey maps to provide a comprehensive overview.

**Keywords.** Travel, Artificial intelligence, Tolls, Vignette, European Union, Centralized platform