

## **ABSTRACT**

In this study, a problem is identified within the queuing system, where physical surges of customers at restaurants or fast-food cafés frequently occur. As a result, the process of receiving service or placing orders often encounters issues, including customer discomfort during waiting times, boredom while queuing, and frequent errors in order taking. This research aims to help customers queue at a restaurant or fast-food café without having to physically wait in long lines. The proposed idea for this issue is known as a Virtual Queue system. In this study, a customer application for the startup Antria was developed using the Goal-Directed Design (GDD) method. The development process includes analyzing customer needs, designing and prototyping, and conducting testing analysis. The mobile-based application features include displaying queue positions, showing estimated waiting times, providing non-cash payment options/e-wallets, and having a simple design with comprehensive information. The testing in this study uses Usability Testing and the System Usability Scale (SUS), successfully achieving an average score of 83.1, a grade of B, and an Acceptable rating in the Acceptability Range.

**Keywords:** Goal-directed design, Usability Testing, System Usability Scale, User Interface.