

# Preferences of Public Transport Passengers Towards Contactless Bank Card Payments

Armira Kontaxi<sup>\*1</sup>, Konstantinos Fotopoulos<sup>2</sup>, George Yannis<sup>3</sup>

<sup>1</sup> Research Associate, Department of Transportation Planning and Engineering, National Technical University of Athens, Greece

<sup>2</sup> Civil & Transportation Engineer, Department of Transportation Planning and Engineering, National Technical University of Athens, Greece

<sup>3</sup> Professor, Department of Transportation Planning and Engineering, National Technical University of Athens, Greece

## ABSTRACT

This research investigates the preferences of public transport passengers regarding the adoption of contactless bank card payments as an alternative ticketing method. The study addresses a growing trend toward digital payment systems in urban mobility, aiming to identify the key factors influencing passengers' acceptance of this innovative ticket validation method. A comprehensive questionnaire was distributed to 550 commuters, targeting aspects such as convenience, familiarity with contactless technologies, demographic characteristics, travel habits, and perceptions of modern and digitalized public transport systems. The data collected were analyzed using binary and multinomial logistic regression models. The findings revealed that passengers' acceptance of contactless bank card payments is primarily driven by convenience and ease of use. Familiarity with contactless payments, such as using bank cards or digital wallets in daily transactions, significantly enhances their willingness to adopt the system. Demographic factors, including age, education, and income, also play a role in shaping acceptance rates, with younger and more tech-savvy individuals being more receptive. Additionally, habits and prior experiences with digital payment methods influence their likelihood of transitioning to this system. A critical insight of the study is that reducing barriers to ticket purchases, such as eliminating the need for cash or physical tickets, increases adoption rates. Payment security was also identified as a decisive factor, as passengers are more likely to embrace the system when reassured about transaction safety. The results highlight the importance of raising awareness and improving access to information regarding the benefits of the new system. Passengers who actively seek information about contactless payments tend to perceive its advantages more clearly and are thus more inclined to embrace it. In conclusion, fostering familiarity, ensuring payment security, and enhancing convenience are pivotal in encouraging public transport passengers to adopt contactless payment methods, ultimately promoting a modern, seamless, and digitalized transport experience.

**Keywords:** public transport, contactless payments, passengers' preferences, logistic regression.