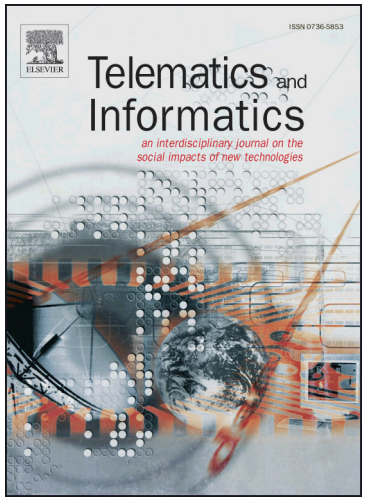

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Drone delivery: Factors affecting the public's attitude and intention to adopt

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Abstract

Drones, or unmanned aerial vehicles (UAVs), show high potential for parcel delivery. Drone delivery may be faster, less expensive, and more eco-friendly than traditional delivery modes such as trucks. Drones are not yet in commercial use, but many companies such as Amazon and Google have done pilot tests, and they will probably become common in the near future. Regardless of what companies decide, however, adoption intention among customers is vague. This study explores the factors affecting attitudes to drone delivery service and intention to adopt among 296 U.S. consumers by online survey. The results demonstrate that the relative advantages of speed and environmental friendliness, along with complexity, performance risk, and privacy risk, affect drone delivery adoption. Personal innovativeness also positively affects adoption intention. Furthermore, the results show that the determinants of drone delivery adoption differ according to the customer's area of residence.

Keywords: drone delivery, unmanned aerial vehicle delivery, diffusion of innovation, technology acceptance model, environmental friendliness

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