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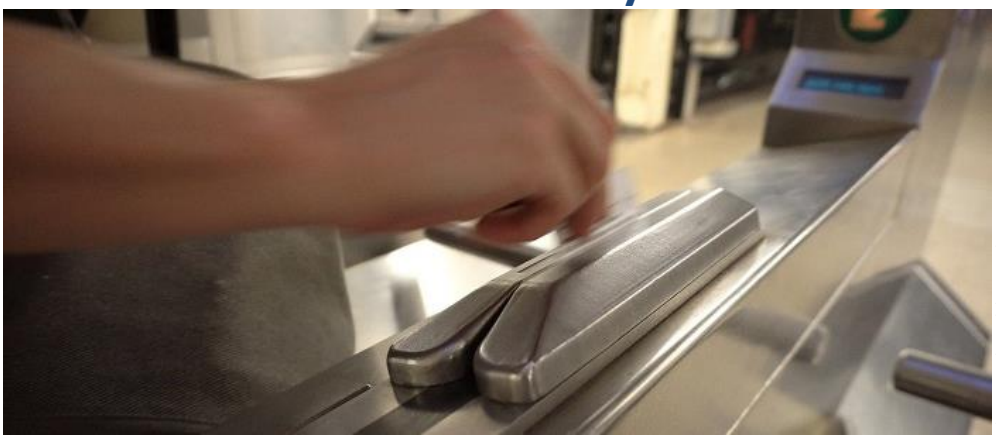
Rail commuters' attitudes towards fare collection and verification systems



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Effective ticketing systems are necessary for public transport systems to be successful. To achieve such ticketing systems, a clear understanding of user attitudes and needs is required. This study explores rail commuters' preferences for certain types of fare collection and verification systems, and the underlying factors that motivate their decisions.

Ticketing is an integral part of the public transport system and serves as the main interface between user and service provider. It influences the overall public transport accessibility, convenience and service quality. Given that users are required to allocate time, effort and money when purchasing a ticket, it is viewed as an inconvenience by users rather than a service. Thus, effective public transport processes for fare collection and verification are critical for ensuring ridership targets are met by service providers.

Mobile ticketing (that is, purchasing and receiving tickets electronically via a smartphone application) is replacing traditional paper or token-based ticketing for public transport and is favourable among users as it removes the need to wait in line to purchase tickets. The development of mobile ticketing reflects the commitment from transport authorities to address ticketing challenges and needs. Of these, fare evasion, cash handling and customer satisfaction are regarded as the most important by transport authorities. To enhance ticketing systems in these aspects, a comprehensive understanding of consumer needs is required.

In general, public transport service quality is measured by exploring passengers' perceptions of the service for one or more quality dimensions, although a standard approach to determine which dimensions should be included is yet to be established. While public transport service quality studies are a mature field, ticketing is a dimension that is often overlooked. his study explored commuters' attitudes towards fare collection and verification systems in the Stockholm-Uppsala corridor, which has the largest proportion of cross-country commuting journeys in Sweden.

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TRIMIS

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Passengers responded to a survey that included questions on commuting behaviour, attitudes towards ticketing and sociodemographic criteria.

Evidence shows that there is no difference in users' attitudes towards ticketing for most commuting habits or sociodemographic characteristics. That is, factors such as gender, age, education, frequency of commuting, chosen service provider, travel time and access mode have no influence on perceptions of ticketing services. However, income, commuting route, ticket type and purchase channel did have an impact on consumer attitudes. The commuting route is part of the transport environment, which has been shown in previous studies to have an impact on passenger attitudes. Ticket type is inherently linked with convenience (for example, an annual ticket has to be purchased less frequently than a monthly or daily ticket). Therefore, it is not surprising that ticket type influences a user's perception of ticketing service.

In general, commuters have a slightly positive attitude towards ticketing. However, while attitudes towards fare collection are slightly positive, users were neutral towards fare verification. The principal implication is that users care about all aspects of ticketing rather than just fares. As such, fare verification aspects should be prioritised when considering improving public transport ticketing systems.

To accommodate users, fare verification systems should focus on automatic ticket checking by turnstiles. This option had a comparatively positive response from consumers compared with other methods particularly manual ticket checking by staff. Staff presence does offer other benefits though, such as improved security and accessibility to public transport information. Since most commuters use their travel time productively (for example, working), the likely explanation for this preference is that any interaction with fare verification staff is viewed as a disruption or distraction. A further possible explanation is that commuters already feel a high level of security and access to information, thus do not see a member of staff as necessary to provide these services. However, this is expected not to be the case for more infrequent users of public transport.

Despite this, turnstile fare verification is subject to the effects created by a barrier (for example, queues forming during busy periods, delays following technical faults, and inconveniences for users with luggage or prams and disabled users). Critically, evidence shows that automatic ticket checking is less effective in combating fare evasion. Thus, while automatic ticket checking may be the preferred choice in general, it has significant ramifications for some users and the service provider. Going forward, a smarter fare verification approach should be considered to allow for passive verification between a smartphone and electronic readers.

One key question the study aimed to address is whether consumers accepted a 'No ticket purchases on-board train' policy. This policy improves boarding times on trains but removes flexibility and accessibility of purchasing tickets. Although service providers expected a negative response from commuters, the attitudes towards the policy were neutral. A likely explanation is that commuters often purchase season tickets and thus have less need to purchase tickets on a frequent basis.