The Electronic Ticketing System (ETS) project aims to develop a new back-office system for electronic tickets and a transportation control system to avoid frauds in stations. ETS also aims to provide open access travel and easy user accessibility platforms with additional services like geo location and mobile application. This system of electronic ticketing is expected to be used in other fields like entertainment and cultural activities such as cinemas, theatres, museums and sports. The ultimate goal is customer convenience and additional service capabilities for the provider.

ADDRESSING THE CHALLENGE
Current transportation systems are nearing their capacity limits and current gates or turnstiles restrain the traffic of persons in the infrastructures and allow frauds. Future transportation must be ‘smart’ so that it cannot only react quickly to the demands placed on it but also anticipate them. The players in the electronic ticketing market will create new self-service ticketing opportunities derived from electronic trade applications and electronic ticketing advertisement platforms. This business-driven technology project will provide specific demonstrations of clear innovative solutions for transportation that have the potential to transform ticketing usage.

PROPOSED SOLUTIONS
The ETS project will design a smarter system to deliver mobile ticketing and media choices to users, with robust user interface options and media demonstrations empowering present ticketing sales channels to go beyond a standard ticketing machine. It will provide specific services like mobile applications for smartphones, price reductions, targeted advertisement and loyalty programmes. All these services will be based on data collection, classification and unique data templates addressed to big data management services with real time models. It will also match electronic tickets geo-location with physical sensors and reduce or remove transportation gates which will be supported by cameras to eliminate the frauds.

PROJECTED RESULTS AND IMPACT
The ETS results will generate multiple benefits. Public safety will be enhanced through the provision of robust urban security, user cases and a transportation security platform for ticketing operations in subways and related locations. The cameras on the station will provide face recognition, face detection and people counting which will decrease the fraud. It will also provide a better and faster passage by eliminating gates. Customers will have access to detailed information about the products and services by loyalty programs. It will both expand and streamline many of the business operations related to transportation whereby the consumer can perform multiple tasks in a single multi-function kiosk. This streamlining will also have a knock-on effect in reduced CO2 emissions and infrastructure spending, with broader implications for quality of life. By consolidating all the needs to coordinate innovative transport technologies across Europe, the ETS smarter transportation system will give managers the power to create dynamic multimodal plans and models, and execute real-time operations based on real-time data. Finally, this electronic ticketing system will also be leveraged for the entertainment sector through additional services to make it easy for users to buy any kind of ticket.
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Project start
January 2016
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