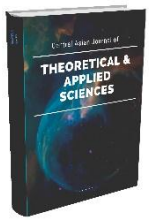

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Opportunities of Intelligent Transport Systems

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Abstract: *In this article given SWOT analysis of intellegent transport systems and use of ITS applications in daily life.*

Keywords: *transport, opportunity, weaknesses, applications, public.*

Introduction

ITS applications increase efficiency by reducing costs for the people or institutions that install, operate and operate road transport infrastructure, and increase travel options and mobility by integrating travel information and effective demand management. Likewise, it minimizes harmful environmental impacts while being efficient, ensures efficient use of resources, and helps protect human health and social fabric through safety practices. The contribution of ITS applications to road safety, a public concern, is at the forefront of ITS's benefits. In this area, the interaction of vehicles on highways with other vehicles, infrastructure and driver assistance systems, health and safety units during traffic incidents and the fastest response to accidents systems can be cited as an example.

ATDM (Active Transportation Demand Management) in the US is a suite of applications that help improve traffic accident management, emergency traffic management applications, and connected vehicle applications. As a result of the work carried out within the framework of this program, together with measures such as the widespread use of seat belts, reduction of alcohol consumption, improvement of vehicles and highways, the rate of traffic accidents on highways decreased by more than 35 in 2010. With such applications, research is conducted to ensure the safety of not only road users in vehicles, but also pedestrians. Nevertheless, ITS applications can be used especially to prevent unfavorable situations that may arise during the transportation of dangerous goods. In addition, AUS applications that detect traffic violations by road users can help drivers improve their compliance behavior, while helping to prevent potential accidents. Potentially bad situations can be avoided with AUS applications that report meteorological events that may affect highway vehicles and provide advance notice of road breakdowns or maintenance operations.

	Strengths		Weaknesses
S1:	Possession of a fleet of modern road vehicles	W1:	Dominant role of road transport oil derivatives transport
S2:	Employees' experience and professionalism in transport	W2:	Insufficient standardization in transport processes
S3:	Established organizational system of continual employee training	W3:	Insufficient distribution of warehouse facilities network
S4:	Integrated quality and security management system	W4:	Insufficiently developed organizational awareness of the need for corporate

Table-1. SW analysis of transport systems

In table-1 you may see the opportunities and weaknesses of transport systems. ITS applications, especially in commercial transportation, reduce travel time and operational costs by tracking vehicle routes. Thus, the economic savings achieved increase the profitability of individual operators.

At the national level, it is to increase sustainable growth of economies and ensure fair competition. Certain ITS applications, such as road infrastructure surveys or weather event reporting, can help commercial fleets determine their routes more efficiently. Likewise, AUS applications that enable automatic and faster toll collection systems reduce toll queues and offer users the opportunity to travel faster at affordable prices.

Another advantage of the exemplary ITS applications mentioned above is that it enables more efficient travel with less energy, especially in fossil fuel-based road transport systems.

Through the proper use of resources, it is possible to reduce the amount of harmful gas emissions and achieve ecological balance. In particular, ITS applications used in the management of traffic in the city ensure that the people living in the city live in a healthy environment and serve to improve the quality of life of people.

Another economic benefit of the widespread use of ITS applications is the increase in the number of companies operating in the technology-based sector, the increase in employment in this sector and the expansion into new markets globally. new technologies. In 2009, ITS software companies in the United States generated $48 billion in revenue, employed 180,000 people, and employed 445,000 people throughout the value chain.

Conclusion

In conclusion, while there are many direct and indirect benefits of ITS applications, the main benefit is making road transport more efficient, safer and more environmentally friendly.

References

1. Adeli, H., & Jiang, X. (2008). *Intelligent infrastructure: neural networks, wavelets, and chaos theory for intelligent transportation systems and smart structures*. CRC press.
2. Cobo, M. J., Chiclana, F., Collop, A., de Ona, J., & Herrera-Viedma, E. (2013). A bibliometric analysis of the intelligent transportation systems research based on science mapping. *IEEE transactions on intelligent transportation systems*, *15*(2), 901-908.

3. Gamboa-Rosales, N. K., Celaya-Padilla, J. M., Hernandez-Gutierrez, A. L., Moreno-Baez, A., Galván-Tejada, C. E., Galván-Tejada, J. I., ... & López-Robles, J. R. (2020). Visualizing the intellectual structure and evolution of intelligent transportation systems: A systematic analysis of research themes and trends. *Sustainability*, *12*(21), 8759.

4. Kuchkorov, T. A., Hamzayev, J. F., & Ochilov, T. D. (2021). INTELLEKTUAL TRANSPORT TIZIMI ILOVALARI UCHUN SUN'IY INTELLEKT TEXNOLOGIYALARIDAN FOYDALANISH. *Вестник КГУ им. Бердаха. №*, *2*, 107.

5. O'G'Li, R. M. R. (2022). AQLLI SHAHAR TRANSPORT TIZIMINING NAZORATIDA KUZATUV KAMERALARI ISHI. *Ta'lim fidoyilari*, *5*(9), 138-142.

6. Xalim o'g'li, A. E., Rovshan o'g, J. R. Y., & Abduvaxob o'g'li, O. N. (2021). INTELLEKTUAL MUHANDISLIK TIZIMLARINING JAMOAT TRANSPORTIDA QO 'LLANILISHI. *Eurasian Journal of Academic Research*, *1*(9), 113-116.

7. Amirqulov, B. O. F., Islamov, B. O. E., O'runov, D. A. O., & Choriev, J. A. O. (2022). O 'ZBEKISTONDA YO 'L TRANSPORT HODISALARINI KAMAYTIRISHDA INTELLEKTUAL TRANSPORT TIZIMLARINING O 'RNI. *Academic research in educational sciences*, *3*(11), 25-30.

8. Berdiyorov, T., & Berdiyorov, A. (2020). Long-range planning of a public transport company. *Архив научных исследований*, (29).

9. Azamatovich, B. T. (2019). MARKETING RESEARCH OF THE TRANSPORT SERVICES MARKET. *Экономика и социум*, *12*, 67.

10. Azamatovich, B. T. (2021). WAYS TO EVALUATE AND INCREASE THE EFFECTIVENESS OF MARKETING RESEARCH IN PUBLIC TRANSPORT. In *International Conference on Agriculture Sciences, Environment, Urban and Rural Development.* (pp. 53-56).

11. Azamatovich, B. T. (2022). Analysis of the State of Marketing Research of Passenger Transport in Public Transport Companies of Jizzakh Region. *Journal of Marketing and Emerging Economics*, *1*(8), 72-86.

12. Azamatovich, B. T. (2019). MARKETING IN TRANSPORT SERVICES. *Экономика и Социум*, *12*.

13. Liu, Y. (2018, January). Big data technology and its analysis of application in urban intelligent transportation system. In *2018 International Conference on Intelligent Transportation, Big Data & Smart City (ICITBS)* (pp. 17-19). IEEE.

14. Berdiyorov, T. (2020, December). Metrobus in separated corridors as an optimal public transport system. In *IOP Conference Series: Earth and Environmental Science* (Vol. 614, No. 1, p. 012056). IOP Publishing.

15. Azamatovich, B. T. (2022, February). INCREASING EFFECTIVENESS OF MARKETING RESEARCH IN PUBLIC TRANSPORT. In *International Conference on Multidimensional Research and Innovative Technological Analyses* (pp. 48-50).