Transportation 4.0 Trend

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Abstract

Digital transportation is a digital service facility integrated and connected to all modes of transportation through a technology-based or digital platform. This research was conducted descriptively based on scopus.com data, where researchers obtained 62 documents entitled digital transportation for the last ten years (2012-2021). The Russian Federation has the most research articles on digital transport, followed by China, the United States, and the United Kingdom. Ten affiliates have the most digital transportation research articles, five research institutes from Russia, two research institutes from China, and one research institute from Indonesia, Germany, and Australia. The Department of Computer Science is the favourite for research articles on digital transportation, followed by Engineering and Social Sciences. The European Commission has the most research funding sponsors on digital tourism, followed by Innovate U.K.

Keywords
Digital transportation, digital service, Computer Science, Indonesia

1. Introduction

Digital transportation is a digital service facility integrated and connected to all modes of transportation through a technology-based or digital platform. This research was conducted descriptively based on scopus.com data, where researchers obtained 62 documents entitled digital transportation for the last ten years (2012-2021). Scopus identifies trends for critical topics with access to manipulable graphical views, charts, and tables so you can view specific parameters. Scopus helps researchers find critical insights and easily communicate them with others. Search results analysis help researchers understand their search metrics by visual examination of search results divided into seven categories (year, source, author, application, country or region, document type, and subject area). Compare journals helps authors find a complete analysis of the journal landscape. Researchers can choose up to 10 journals to upload to charts for comparative analysis and compare using various metrics. The article metrics module helps researchers see the impact of citations and scholarly community engagement for an article. The sidebar on the article page highlights the minimal number of meaningful metrics researchers need to evaluate the effect of citations and levels of community engagement. Clicking will open a metrics detail page showing all available metrics and their underlying content, which can be used for further analysis and understanding. Citation Overview helps analyze citation trends for a specific article, result set, or list of author documents. The overview displays the number of citations per year for each piece you select in tabular format. The author profile page helps analyze and track individual citation history. From the profile page, one can view total citations, author document counts, h-index, ORCID records (where available), and
access a collection of in-depth and visual analysis tools designed to give a better picture of the history and influence of individual publications. (M.I. Setiawan, Abdullah, Lestari, & Yuniningsih, 2019).

2. Literature Review
Based on years 2018-2020 research papers, include:

Researchers get information that digital transportation proliferates nowadays in port areas and airports, which integrates public transit supporting facilities for improving environmental quality, especially in East Java.
3. Methods and Data Collection
Digital transportation is a digital service facility integrated and connected to all modes of transportation through a technology-based or digital platform. This research was conducted descriptively based on SCOPUS.COM data. Researchers obtained 62 documents entitled digital transportation articles for the last ten years (2012-2021). SCOPUS.COM identifies trends for critical topics with access to manipulable graphical views, charts, and tables so you can view specific parameters. SCOPUS.COM helps you find key insights and easily communicate them with others. Search results analysis: Understand your search metrics better with a visual examination of your search results divided into seven categories (year, source, author, application, country or region, document type, and subject area). Compare journals: Get a complete analysis of the journal landscape. Choose up to 10 journals to upload to charts for comparative analysis and compare using various metrics. Article metrics module: Quickly see the impact of citations and scholarly community engagement for an article. The sidebar on the article page highlights the minimal number of meaningful metrics researchers need to evaluate the effect of citations and levels of community engagement. Clicking will open a metrics detail page showing all available metrics and their underlying content, which can be used for further analysis and understanding. Citation Overview: Analyze citation trends for a specific article, result set, or list of author documents. The overview displays the number of citations per year for each article you select in tabular format. Author profile page: You can quickly analyze and track individual citation history. From the profile page, one can view total citations, author document counts, h-index, ORCID records (where available), and access a collection of in-depth and visual analysis tools designed to give a better picture of the history and influence of individual publications. (M.I. Setiawan, Abdullah, Lestari, & Yuniningsih, 2019). The analysis mode uses (1) research country documents; (2) affiliation documents; (3) affiliation documents; and (4) funding sponsor documents.

Figure 1 above shows the SCOPUS.COM profiles.

4. Results and Discussion
First, the researcher obtained 12 research state documents from the Russian Federation. China follows it with eight documents, the United States 8, Britain 4, Germany 3, Indonesia 3, Portugal 3, and Switzerland 3 documents. The Russian Federation has the most research articles on digital transport, followed by China, the United States, and the United Kingdom.
Second, the researcher obtained affiliation documents. The documents obtained were from Saint Petersburg State Marine Technical University (Russia) 2 documents, Moscow Automobile and Road Construction State Technical University MADI (Russia) 2, Peter the Great St. Petersburg Polytechnic University (Russia) 2, Russian University of Transport (Russia) 2, Chinese Academy of Sciences (China) 2, Bina Nusantara University (Indonesia) 2, Technical University of Munich (Germany) 2, Beijing Jiaotong University (China) 2, University of Technology Sydney (Australia) 2, and Emperor Alexander I St. State Transport University. Petersburg (Russia) 2 documents. All ten affiliates have the most research articles on digital transportation.

Figure 2 above shows the SCOPUS.COM the documents of the research country about World Digital Transportation Research.

Figure 3 above shows the SCOPUS.COM the documents of the affiliation about World Digital Transportation Research.
Third, the researcher obtains the document of the field of study. The documents obtained consisted of Computer Science 30 documents, Engineering 25, Social Studies 10, Business, Management and Accounting 9, Mathematics 9, Decision Science 7, and Environmental Science 7 documents. The field of study in Computer Science is the favorite research article on digital transportation, followed by Engineering and Social Sciences.

![Documents by subject area](image)

Figure 4. the documents of the subject area

Figure 4 above shows the SCOPUS.COM the documents of the subject area about World Digital Transportation Research.

Finally, researchers obtained funding sponsor documents. The invention consists of 3 European Commission documents, Innovate U.K. 2, and others only 1 document. Thus, the European Commission has the most research funding sponsors on digital tourism, followed by Innovate U.K.

![Documents by funding sponsor](image)

Figure 5. the documents of the funding sponsor

Figure 5 above shows the SCOPUS.COM the documents of the funding sponsor about World Digital Transportation Research.
5. Conclusion
Digital transportation is a digital service facility integrated and connected to all modes of transportation through a technology-based or digital platform. This research was conducted descriptively based on scopus.com data, where researchers obtained 62 documents entitled digital transportation for the last ten years (2012-2021). The Russian Federation has the most research articles on digital transport, followed by China, the United States, and the United Kingdom. Ten affiliates have the most digital transportation research articles, five research institutes from Russia, two research institutes from China, and one research institute from Indonesia, Germany, and Australia. The Department of Computer Science is the favourite for research articles on digital transportation, followed by Engineering and Social Sciences. The European Commission has the most research funding sponsors on digital tourism, followed by Innovate U.K.

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References


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Muhammad Isradi, born in Kandangan on 18 August 1972. He is the secretary of the Civil Engineering Department at Mercu Buana University. He earned a degree in Civil Engineering from Universitas Muhammadiyah Malang in 1998 with the thesis entitled "One-Way Flat Plate Planning at Ratu Plaza Madiun. He then obtained a Master's degree in Civil Engineering, Transportation Concentration from Brawijaya University in 2001 with a thesis entitled "Family Movement Awakening Model in Sawojajar Housing Area, Malang." He also teaches several subjects such as Pavement Planning, Geometric Road Planning, Transportation Planning, and Environmental Engineering.

Paisal Halim received a bachelor's degree in Social Science Education – Pancasila Moral Education (1985) from the Indonesian Teacher Training and Education Institute (IKIP), Masters in Humanities in 1997 from Hasanuddin University Makassar Indonesia, Doctor of Social Science Philosophy (Sociology) 2008 Hasanuddin University, Makassar Indonesia. Currently, he is a lecturer and professor in the postgraduate government administration study program at the National University of Jakarta, Indonesia. Actively providing various training and mentoring for young lecturers in writing journals, books and other scientific works related to the fields of sociology, government science and public policy at several universities in Indonesia. Currently, he is the President of IPEST (an international association of economic, social and technology researchers and founder of various e-journals: JILPR Indonesia Law and Policy Policy, IJESS International Journal of Education and Social Science. His research interests include Human Resource Management, development sociology, public policy, leadership, government science and tourism.

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