Prospective study on the potential of big data in railways

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Abstract: Now new information technologies are actively implemented and used for development of different areas of industry, transportation, including the railway industry. In our work solutions to the problems of railway industry based on Big Data are presented. Key terms, basic characteristics and stages of big data are presented. Global achievements in railway industry are analysed, provided examples of foreign authors, functional block diagram of big volumes of data is developed.

Keywords: big data, data analysis, railway engineering.

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References

- Lady Mitchell Hall, The Vocabulary of Big Data, Demystifying Data Science. Cambridge, 26th January 2015.
- [2] Nii Attoh-Okine, The Future Marriage of Big Data and Railroad Engineering. // 2014 IEEE International Conference on Big Data. // 2014 IEEE International Conference on Big Data. 2014
- [3] Divakar Mysore, Shrikant Khupat, Shweta Jain. Big data architecture and patterns, Part 1: Introduction to big data classification and architecture. // IBM Corporation. -2013.