DATA SCIENCE APPLICATIONS IN FINANCIAL INSTITUTIONS

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Abstract. Development of information technologies (IT) has contributed to widespread of such terms as "big data", "machine learning", "data mining" which can be referred all together as "data science". However, understanding of what is "data science" significantly varies among and even within organizations. This article is aimed to identify applications of data science in financial institutions that can be identified in academic publications and reputable widespread publications by organizations from consulting, financial and IT industries. Classification of identified applications will help to describe potential differences in understanding of the topic among organizations. Research object is financial institutions, research subject is data science applications. Combination of three research methods are used in this research – literature meta-analysis, systematic literature overview and qualitative content analysis. Novelty of research is classification of data science applications in financial institutions. Authors limit financial institutions to banking institutions, non-bank lending institutions and organizations connected with payments and payment cards (retail oriented financial institutions).

Keywords: Big Data, Data Mining, Data Science, Financial Institutions

JEL Classification: O33, M15