Using data analytics for risk analysis on the capacity of migrants to cross illegally the border

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The migration risks are increasingly prevalent and complex to manage at the border control. Given the inefficiencies of traditional manual risk management practices, research has progressed to using data analytics to objectively and dynamically manage risks on illegal migration. The rapid development of technology has also prompted further innovations in border control. However, border guard agencies must consider practical issues such as machine learning approach on risk assessment to identify the illegal crossings.

The method for this paper will be used the empirical method. Through empirical method will be observed the act of illegal migration that could be performed through different ways. The empirical method would help to produce new solutions for using machine learning in the context of investigation of illegal migration.

This paper aims to study and design a risk assessment system based on big data technology. It is hoped that the system will enhance the ability of border guard agencies to identify the risks of illegal crossings, so as to solve the problem of illegal migration.

As the expected result, the paper will address new approach for investigating cases of illegal migration by using machine learning and big data.

Keywords: Illegal migration, risk analysis, machine learning