Big Data-Driven Smart Policing: Big Data-Based Patrol Car Dispatching in Abu Dhabi, UAE

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Abstract : Big Data has become one of the buzzwords today. The recent explosion of digital data has led the organization, either private or public, to a new era towards a more efficient decision making. At some point, business decided to use that concept in order to learn what make their clients tick with phrases like 'sales funnel' analysis, 'actionable insights', and 'positive business impact'. So, it stands to reason that Big Data was viewed through green (read: money) colored lenses. Somewhere along the line, however someone realized that collecting and processing data doesn't have to be for business purpose only, but also could be used for other purposes to assist law enforcement or to improve policing or in road safety. This paper presents briefly, how Big Data have been used in the fields of policing order to improve the decision making process in the daily operation of the police. As example, we present a big-data driven system which is sued to accurately dispatch the patrol cars in a geographic environment. The system is also used to allocate, in real-time, the nearest patrol car to the location of an incident. This system has been implemented and applied in the Emirate of Abu Dhabi in the UAE.

Keywords : big data, big data analytics, patrol car allocation, dispatching, GIS, intelligent, Abu Dhabi, police, UAE
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