Data analytics and National security

What is the issue?

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Indian defence and police forces are effectively using data analytics for countering their foes.

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What is data analytics?

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- Data analytics is the process of examining data sets in order to draw conclusions about the information they contain, increasingly with the aid of specialized systems and software.
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- It is widely used in commercial industries to enable organizations to make more informed business decisions.
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- Globally, defence analytics is a $2 billion market but it is still at a nascent stage in India.
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- Few budding analytics firms in India had helped the army in predicting border infiltration patterns and provided analytics services to BSF, CRPF and Police departments across the country.
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Where all does it find relevance?

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- **Border Incursion -** Terrorists on the other side of the border usually send a herd of cattle to check for mines that the armed forces have placed on the border.
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- Analysis of past data has shown that the next incursion is likely to happen in about eleven or twelve days after a herd of cattle meanders close to the border.
- **Public agitation -** When an agitation happens anywhere across the country, there are multiple factors like social media posts, hashtags or news articles, religious group's posts, etc
- Based on these correlation metrics, all data are merged with the intelligence data from police agencies and a protest or agitation is predicted.
- **Smuggling** - Few data analytics also predict that cross border infiltration and narcotic smuggling spike upwards on cloudy and foggy days.
- **Bomb Blast -** During the 2013 Bangalore blast, Intelligence department analysed 1000 gigabytes of CCTV images from 3-5 traffic signals to reach out the criminal.
- **Locating strategic areas -** During the 2016 assembly elections, Police in Assam used GPS data to plan the deployment of forces.
- GPS imagery was used to plot polling booths routes in insurgency hit areas and plan force deployment better in case of disaster recovery.
- **Locating the criminals -** Based on data points of where anonymous calls are arising during any political unrest, police allocate more patrolling vans to those areas.
- Using frequency of cell phone tower signals police can locate criminals.