ABSTRACT

In the field of business, the owner having some crucial data may need to share it with third-parties. These trusted third-parties may use this data for their own benefit causing reputational and monetary damage to the owner's company. If some of the shared data is discovered at some place where it isn't meant to be (e.g. on a website without authorization), it is quite possible that one or more of the trusted third-party agents is responsible for such data leakage.

When such data is leaked out it leaves the company in an insecure state. This uncontrollable data leakage puts businesses in a susceptible position.

In this system, the owner who shares crucial data is called the distributor and the supposedly trusted parties are called Agents. This system shows that it is possible to assess the likelihood that an agent is responsible for a leak, based on the overlapping & non-overlapping of data. Non-overlapping data is such that each agent receives different unique data (i.e. email id's) along with unique fake objects (i.e. fake email ids). When two or more agents receive some data in which certain attributes are the same (overlapping data), the guilty agent is determined by calculating probability and with the help of a Mail detection system.