OPTIMIZING SPAM FILTERING WITH MACHINE LEARNING

DEFINE THE PROBLEM

- **SPECIFY THE BUSINESS PROBLEM**
    1. Over recent years, as the popularity of mobile phone device has increased, short message service(SMS) has grown into a multi-billion industry
    2. Due to spam service providers suffers from financial problems as well as it reduces calling time for users.
    3. Unfortunately, if the user accesses such spam SMS they may face the problem of virus or malware.
    4. It may lead to frustration for the user.

- **BUSINESS REQUIRMENTS**
    1. A business requirement for an SMS spam classification system identify and flag spam messages, protect customers from unwanted or harmful messages, and comply with industry regulation and laws regarding spam messaging.
    2. High volume of messages, integrate with existing systems and databases and track performance and improve the system over time.
    3. Easy to use interface and be easy to maintain and update.

- **LITERATURE SURVEY**

    1. In current state of SMS spam classification and to identify potential arear for improvement and future research.
    2. Machine algorithm natural language processing, and rule based system.
    3. It would be important to check the pre-processing techniques used in the research understand how to properly clean and prepare the data for the classifier.

- **SOCIAL OR BUSINESS IMPACT**

    - **SOCIAL IMPACT**

    1. It can help protect individuals from unwanted and potentially harmful message.
    2. Spam messages can include phishing attempts, scams and fraud, which can have serious financial and personal consequences for recipients.

    - **BUSINESS MODEL/IMPACT**

    1. It can help protect their customer and improve their reputation.
    2. Spam messages can harm a businesses reputation and lead to customers complaints and lost business.