

# Research Proposal Presentation Outline

## Project Title:

- Design and implement a Data Loss Prevention framework for a financial institution that protects customer financial information.

## Significance/Contribution to the discipline/Research Problem:

- This research would focus on the development of framework to implement Data loss prevention (DLP) within the financial institution's network, while the cloud-based components will be used to store and analysis data from endpoints, such as laptops and smartphones.

## Research Question:

- How can a tailored Data Loss Prevention (DLP) solution effectively protect customer financial information in financial institutions
- **Aims and Objectives:**
  - To design and implement an effective Data Loss Prevention (DLP) solution tailored for financial institutions to ensure the security of customer financial information.

### Objectives:

- Investigate current DLP strategies employed by financial institutions.
- Identify vulnerabilities and gaps in current DLP systems.
- Propose a model that covers data at rest, data in transit, and data in use.
- Develop and implement the proposed DLP model in a simulated financial environment.
- Assess the effectiveness of the implemented DLP solution through controlled testing.

- **Key literature related to the project:**

### Background of DLP Systems:

- Understanding Data Loss Prevention
- Data Security in the Financial Sector

### Financial Data Vulnerabilities:

- Security Gaps in Modern Banking
- Financial Data Breaches:

### Existing DLP Technologies:

- Modern DLP Solutions: A Comparative Analysis
- Financial Institution Security Measures

- **Methodology/Development strategy/Research Design:**

### Qualitative Research:

- Review current market DLP solution and implementation process
- Analyse reported data breaches specific to financial information leaks.

### Quantitative Research:

Evaluate the effectiveness by measuring parameters such as detection rate, false positives, and response time.

- **Ethical considerations and risk assessment:**
  - Ensure all personal and sensitive data from interviews are anonymized.
  - Obtain approval before testing or implementation
- **Timeline of proposed activities:**
  - Timeline for the project