## Risk of Data Breaches in Financial Institutions: A Routine Activity Perspective



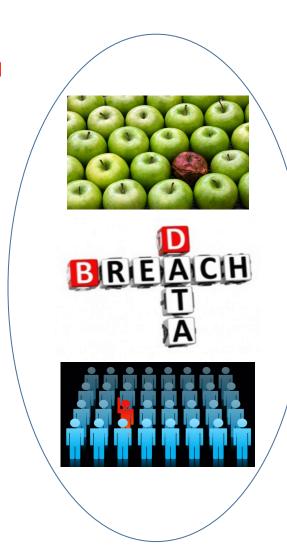
89% of the organizations believed they are at risk from insider attacks / 55% suggested privileged users posed the biggest threat to corporate data (Vormetric 2015)

## Insiders pose a substantial threat to financial institutions by

- Virtue of their Knowledge of accessing database
- Ability to bypass security measures through legitimate means (CERT 2012)

## **Solution:**

- Focuses on both individual and organizational factors may influence risk assessment of sensitive data breach (Threat, Vulnerability and Asset).
- Value, Inertia, Visibility, Accessibility, information availability, Absence of Guardians, and Risk Appetite





Adapt Routine Activity Theory (RAT) factors for risk assessment - considered as asset characteristics of sensitive data.

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Information availability & absence of guardians and risk appetite and RAT can be utilized for risk assessment of sensitive data breach in organizations

Monetary factors as well as non monetary including hedonic factors are important to understand value

## **Broader Impact:**

Help security managers to understand the factors of risk assessment with respect to both Individual and organizational information assurance factors

Suggest need for more appropriate applications of security controls and importance of data protection

Provide comprehensive measures of risk assessment of sensitive data breach

Awards: 1419856 and 1420758

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