

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

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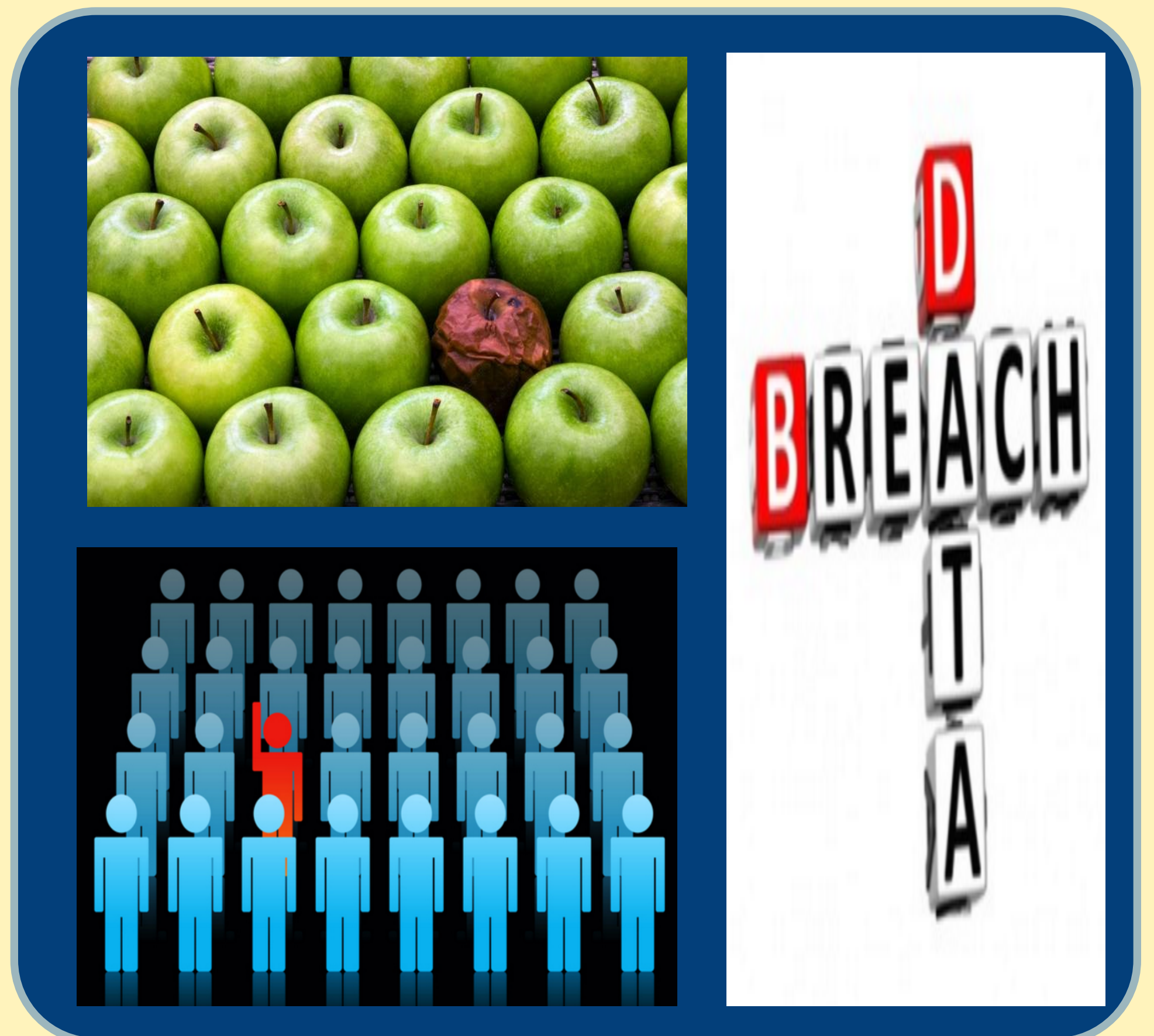
The objective of this our work is to provide insightful information that can help security managers to understand the factors of risk assessment with respect to perceptions of both Individual and organizational information assurance factors

Challenges

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)

Why Insider?

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)

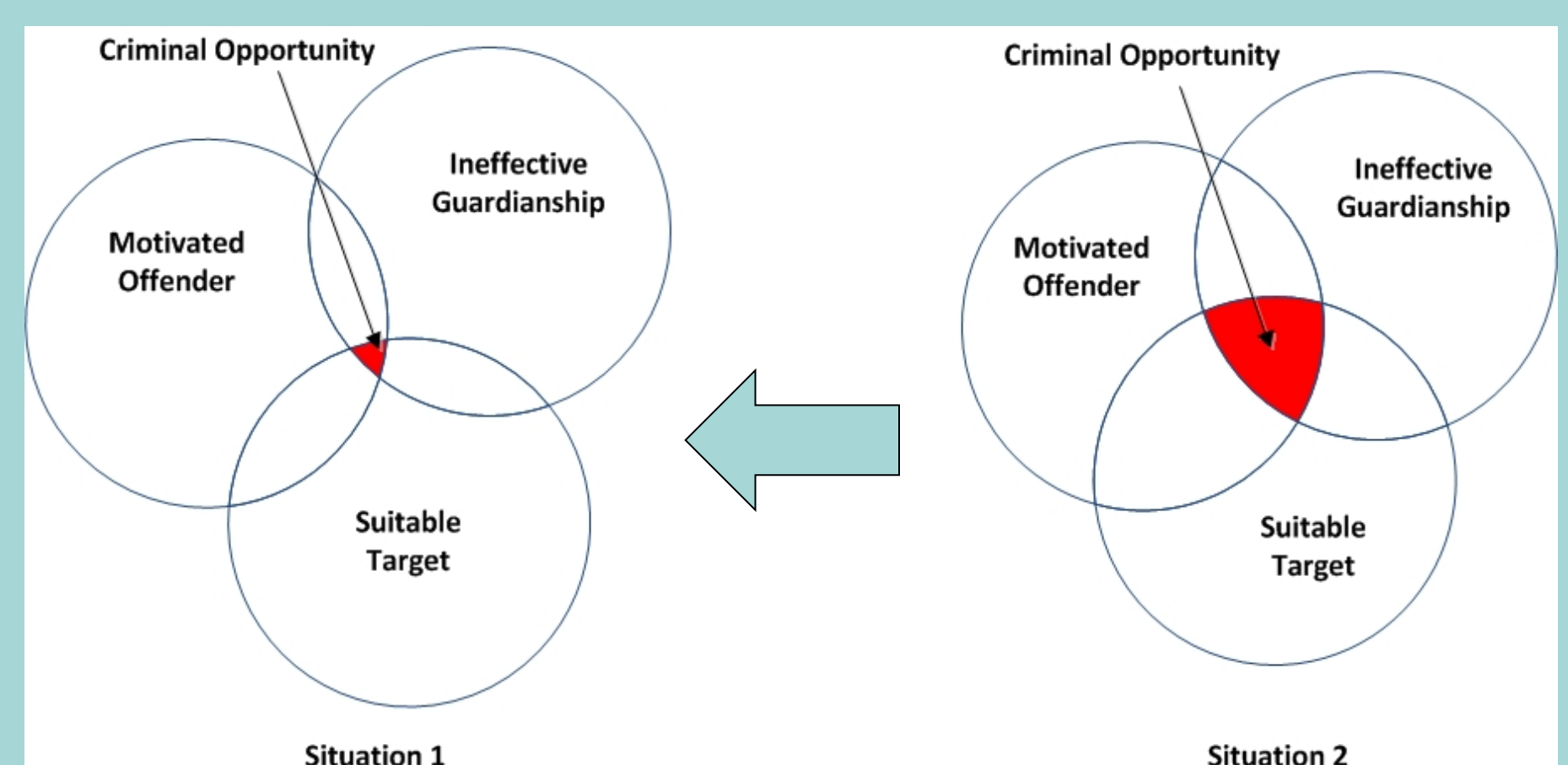


Scientific Impact

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

Introduce the **information availability & absence of guardians** to RAT and considered as **vulnerability**

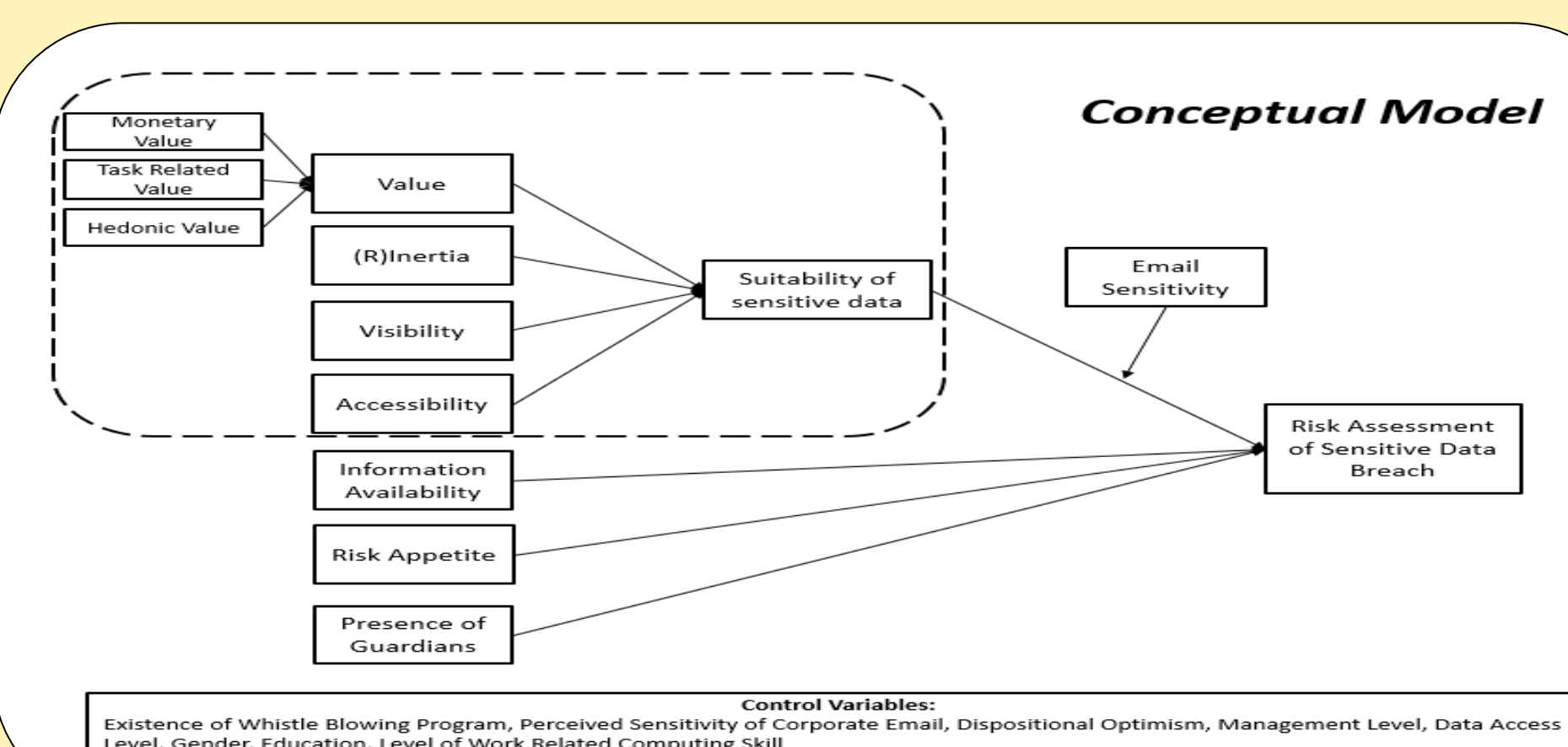
Organizational **risk appetite** applied as a factor of organizational **threat** toward risk assessment of sensitive data breach



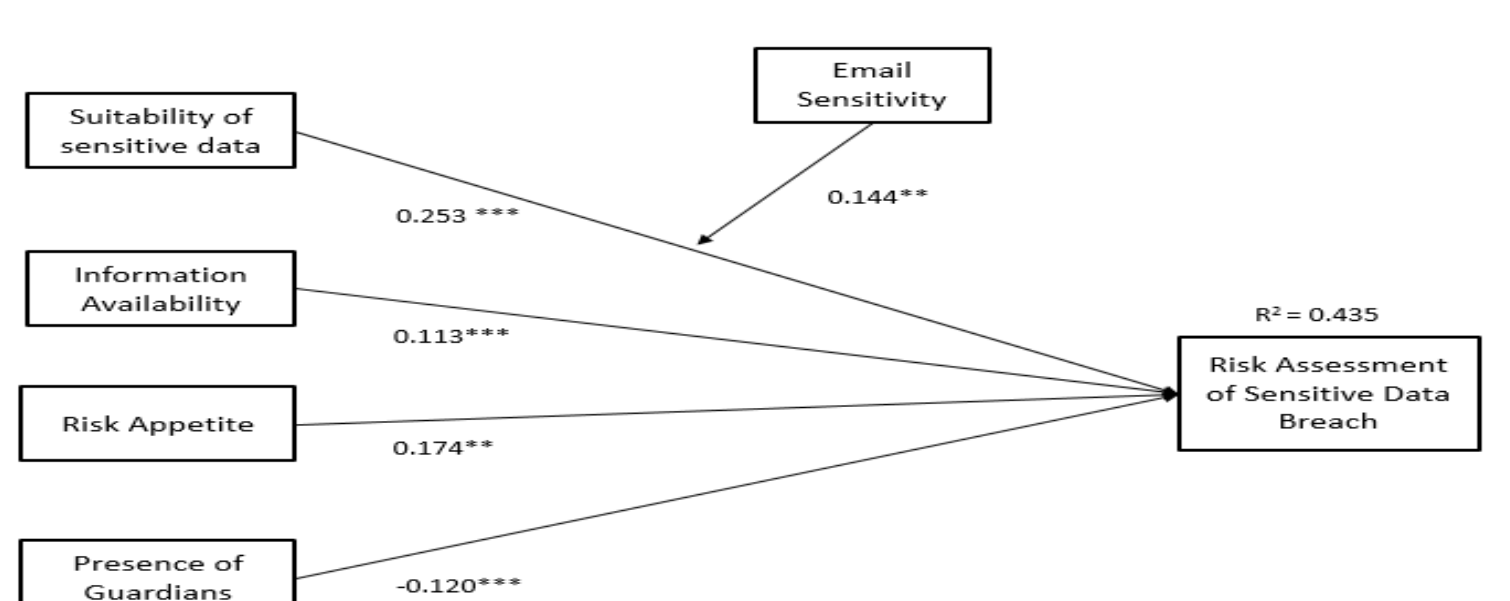
Our Approach

We focused 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



Result



Control Variables: Existence of Whistle Blowing Program, Perceived Sensitivity of Corporate Email, Dispositional Optimism, Management Level, Data Access Level, Gender, Education, Level of Work Related Computing Skill

Contributions

We **applied RAT** as an underlying theory to understand risks and develop a model. We suggested needs of more appropriate applications of **security controls** and importance of **data protection**. We provided **comprehensive measures of risk assessment** of sensitive data breach.

Interested in meeting the PIs? Attach post-it note below!



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