Reading the Disclosures with New Eyes: Bridging the Gap between Information Security Disclosures and Incidents
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Information Security Incidents
Media announcements from 1997 to 2006 in the Wall Street Journal, USA Today, the Washington Post, the New York Times, CNET, ZDNet by searching 12 keywords

Stock price reactions (cumulative abnormal return, CAR) to information security incidents in the two-day period around announcements after controlling for confounding effects

Results:
1. Cross-sectional analysis: First time disclosures mitigate the impact of information security incidents
2. Content analysis: system failure, interruption, or disruption negatively correlated with CAR

Cluster Analysis (Text Mining)
Disclosures of Information Security in Financial Reports
1. Control Report, mandated by SOX
2. Voluntarily disclosed Information Security Risk Factors

Classification Model (Text Mining)
Disclose additional and more specific risk factors after incidents
Classify disclosures based on stock price reactions to incidents with 60% accuracy

Results:
1. Reflect possible security concerns → lower investors' sensitivity to information security incidents
2. Different disclosure patterns help firms lower stock price reactions to information security incidents