

# Red Flags in Sales: Using Big Data and Machine Learning to Predict Salespeople's Fraud

**Nora Pöpping**

University of Bochum

**Sascha Alavi**

University of Bochum

**Christian Schmitz**

University of Bochum

**Maximilian Frieß**

Ludwig Maximilian University of Munich

Cite as:

Pöpping Nora, Alavi Sascha, Schmitz Christian, Frieß Maximilian (2023), Red Flags in Sales: Using Big Data and Machine Learning to Predict Salespeople's Fraud. *Proceedings of the European Marketing Academy*, 52nd, (114189)

Paper from the 52nd Annual EMAC Conference, Odense/Denmark, May 23-26, 2023



# Red Flags in Sales: Using Big Data and Machine Learning to Predict Salespeople's Fraud

## **Abstract**

Unethical behavior of salespeople endangers a company's reputation, customer relationships, and performance. In response to the dangers of undetected red flags, defined as salespeople who have committed fraud regarding dealings with customers, prior research provides a solid foundation for singular antecedents of red flags through survey or experimental data. To gather insights from real-world phenomena, we employ an empirics-first approach and use machine learning to build theory and establish a comprehensive view of drivers of red flags and the manner in which they interact. We leverage data from a major insurance company which objectively tracked and analyzed their salespeople's red flags. Results of the empirical study comprising 316 salespeople both confirms established but also uncovers previously hidden drivers of red flags. Thereby this study extends salespeople's unethical behavior research and provides the means with which the black-box of machine learning can be opened.

**Subject Areas:** *Business-to-Business Marketing, Sales Force*

**Track:** Sales Management and Personal Selling