

The IR papers



BY JEFF COSSETTE

WATCH YOUR 'P'S AND NONVERBAL CUES

It's getting harder to lie – just ask UK housing benefit fraudsters, or US insurance company swindlers. Plenty of each group have been exposed by new technologies that analyze voice-wave patterns to detect deception via minute, involuntary changes in response to stress, cognitive processes or emotion. Now these technologies have been tested in a capital markets setting.

In one study, investigators at Duke University used voice analysis software to detect emotion in a sample of quarterly earnings call

audio files. Not only were non-verbal cues predictive of future stock market performance (for example, managers struggling to hide bad news that is later brought to light), but it also became evident that investors and analysts can pick up on managerial cognitive angst.

Yet according to William Mayhew, assistant professor of accounting at the Fuqua School of Business, analysts don't incorporate the information when making short-term earnings forecasts. 'They do, however, use it when making stock

recommendation changes, but then only based on positive – and not negative – effect,' he says.

To test the findings further, researchers brought the voice analysis software into the lab with an experiment designed to mimic the conditions and incentives of a quarterly earnings call. They found voice-based analysis worked to separate the 'mis-reporters' from the truth-tellers 71 percent of the time, and was especially effective during the early part of the encounter.

'The result suggests there may be potential for financial analysts and auditors to use the technology to uncover financial mis-reporting,' says study co-author Jessen Hobson, assistant professor of accountancy at the University of Illinois. Further research is needed, however. Hobson and his colleagues are now investigating whether the technology works better than a human at detecting C-suite deceit.

According to other research, many linguists believe deceptive speech contains fewer first-person and third-person pronouns but more emotionally negative words and motion words. Deceptive answers are also longer, contain more hesitations and have higher speech rates. Curiously, linguistic cues demonstrated little predictive ability in the laboratory experiment, which found better results with vocal waveform analysis. ■

Next month: Disclosure quality pays off (for some).

World o' research

- A study of individual investors in the United Arab Emirates finds religious reasons the most influencing factor on investment decisions.
- Analysts are more upbeat about core industry stocks in their research portfolios. Conversely, diversified analysts who cover stocks from outside their core industry make less optimistic recommendations and are less likely to upgrade, according to a US study.
- When researchers at Spain's University of Zaragoza analyzed the stock market reaction to non-financial press releases of 145 European technology companies, they found investors react positively to information about a firm's capacity to consolidate its position, diversify and grow. News on product launches and upgrades leaves them cold.