

THE "SNIFF TEST" – A BIG AI ISSUE RESOLVED

Al has the power to grow or destroy your CEO/CFO/COO/CMO/GC career. Using an inexpensive, easy-to-implement "sniff test" before allowing any big data/Al generated information into your company's financial, legal, operational, and/or marketing databases can keep your career (and your company), your health, and maybe even your life from joining the Al casualty list that includes:

- The CEO, COO, President, and Counsel of *Sports Illustrated* were fired—and the *Sports Illustrated* publisher lost its licensing—after publishing several articles with fake author names and headshots from an Al-generated image website.
- Six U.S. lawyers were sanctioned for citing several previous court cases proving precedence that emerged as fake Al-ChatGPT cases. The judge stated that ethics rules impose on attorneys "to ensure the accuracy of their filings."
- Mayo Clinic and American Society for Health-Systems Pharmacists' Long Island University's research have discovered
 the following regarding ChatGPT advice: the answers for medical, pharmaceutical, suicide, addiction, and sexual assault
 questions are often incomplete, inaccurate, or even dangerous to a person's health if followed.
 - WORSE, ChatGPT fabricates realistic "deceptive forgeries of scientific references, even listing the names of real authors with previous publications in scientific journals."

Something needs to be done that will keep such information out of your company's databases where it will be used to create systems, products, services, marketing materials, strategies, etc. that could be based on false information. Therefore, my final project choice for my Harvard University's Statistics 101 and R class was to evaluate a simple statistics process that could easily "sniff" out false information. I chose potential spurious correlations—i.e., two statements that appear to be related/associated, but really have nothing to do with each other—they're coincidence or there's another unseen factor causing or related to both statements.

The article chosen described U.S. auto loan default rates that was written by three finance professors from a well-known university, published by a prestigious journal. They used a comprehensive database covering all 50 US states for a specific time period. I verified their conclusions with an industry expert, who said their inferences looked reasonable/logical. My "sample" was an auto loan database of 17,000 customers of a US finance company covering all 50 US states during the same time period as the university paper. My industry expert confirmed that the data being measured in both the journal paper and the finance company sample were likely to be measuring the same factors covered in the authors' conclusions. My accurate basic statistical testing procedure provided analytical conclusions that did NOT support the paper's conclusions.

CAREER SUGGESTION: Before you include or base your financial, marketing, operational, and/or legal corporate decisions upon something that appears logical/accurate, find someone who can run basic simple regressions and descriptive statistical tests on that information by comparing it to a larger, bona fide database (think Federal Reserve Bank's stats, OECD, etc.) to see if there is confirmation of the same results. If not, do NOT use until a data scientist (many universities have them and many more companies are/will be providing these services) confirms which and what information is valid and what is not.

BOTTOM LINE: The era of "TRUST, THEN VERIFY" is dead. The new era of "TEST, THEN VERIFY, THEN TRUST" has begun for careers and companies wanting to enhance their probabilities of continued growth during the emergence of Al.

References

- Armstrong, K. (2023, May 27). ChatGPT: US lawyer admits using AI for case research. BBC News. https://www.bbc.com/news/world-us-canada-65735769
- Bowman, E. (2024, January 19). Sports Illustrated to lay off most of its staff amid severed licensing deal. NPR. https://www.npr.org/2024/01/19/1225680000/sports-illustrated-lays-off-most-of-its-staff
- Draper, K., & Mullin, B. (2024, January 19). Sports Illustrated Thrown Into Chaos With Mass Layoffs. The New York Times. https://www.nytimes.com/2024/01/19/business/media/sports-illustrated-mass-layoffs.html
- Federal Reserve Bank of New York. (2023). Quarterly report on household debt and credit: 2022 Quarter 4. https://www.newyorkfed.org/microeconomics
- Graham, K. (2023), Potential Statistical Solutions to Offset Al ChatGPT's Spurious Correlations. The HQ Companies. https://thehqcompanies.com/HQWhitePaper-Statistical-Solutions-to-Offset-Al.html
- Gravel, J., D'Amours-Gravel, M., & Osmanlliu, E. (2023). Learning to fake it: Limited responses and fabricated references provided by ChatGPT for medical questions. *Mayo Clinic Proceedings: Digital Health* 1(3), 226-234. https://doi.org/10.1016/j.mcpdig.2023.05.004
- Halpert, M. (2023, December 12). Sports Illustrated publisher fires CEO Ross Levinsohn after AI scandal. BBC News. https://www.bbc.com/news/world-us-canada-67619015
- Maruf, R. (2023, May 29). Lawyer apologizes for fake court citations from ChatGPT. CNN. https://www.cnn.com/2023/05/27/business/chat-gpt-avianca-mata-lawyers/index.html
- Pamies, P. (2023). Guarding against the uncertain perils of Al [Editorial]. *Nature Biomedical Engineering* 7, 705-706. https://www.nature.com/articles/s41551-023-01064-8
- Paul J., Ueno, A., & Dennis, C. (2023). ChatGPT and consumers: Benefits, pitfalls, and future research agenda. *International Journal of Consumer Studies* 47, 1213-1225. https://doi.org/10.1111/ijcs.12928
- Richman, J.T., & Roberts, R.J. (2023). Assessing spurious correlations in big search data. *Forecasting, 5*, 285-296. https://doi.org/10.3390/forecast5010015
- Viswanathan, G. (2023, December 10). Chat GPT struggles to answer medical questions, new research finds. CNN Health. https://edition.cnn.com/2023/12/10/health/chatgpt-medical-questions