Adam Blank, Jeran Kilpack, Oren Moreno, Alexis Saravia

ITAI 3374 On-Premises AI Hardware Platform

Professor: Mikel Chamblee

December 8, 2024

**Business Problem Description**

Marketing teams have always gathered information on their products through various methods to understand their brand’s perception, identify their advantages and shortcomings, and develop strategies to enhance visibility and profitability.

Here are some of the methods for gathering information: Customer feedback and surveys, market research, website and analytical data, sale data analysis, tracking competitors, and social media listening. While each plays a role in public relations, we would like to focus on the social media listening aspect.

With businesses sprouting up worldwide, the varying degree to which businesses can tackle marketing and public relations with AI or even tap into that market presents three significant challenges in implementing AI solutions:

1. They need to maintain data security by using locally run AI models. Protection of sensitive data is essential for maintaining customer trust and brand reputation.
2. High infrastructure costs are associated with traditional on-premises AI processing hardware. Setting up an on-premises AI infrastructure requires significant upfront costs including purchasing high-performance hardware (like GPUs and TPUs), networking equipment, storage systems, and cooling solutions. These expenses can be prohibitively expensive for small businesses.
3. The need for quick brand sentiment analysis across multiple social media and news platforms. Small businesses may lack the in-house expertise needed to develop and manage these AI systems.

Businesses should understand why marketing and having a PR team is important especially during crisis management. From various points in market history, we can pull examples from when timely action and responses were needed to avert more financial loss from company mistakes. Take for example the recent 2023 Silicon Valley Bank collapse, the second biggest bank failure in US history. During the height of uncertainty in financial markets, and rise in interest rates, SVB was holding bonds that had lost substantial value. While the bank was at the time worth billions, they made the terrible mistake of releasing a statement which only spoke about the losses, leading to the biggest run on the bank. In the words of Zach Cutler, CEO of PR agency Propel: “Had the bank explained that it was still cash positive despite the losses on the bonds, there wouldn’t have been a bank run as depositors rushed to withdraw cash, and SVB would have likely survived” (*The top PR crises of 2023*). Examples like these highlight the importance of sentiment analysis to make informed response.

Below I’ll present even more visual examples to illustrate the severity of a good marketing and PR team is during crisis:

A screenshot of a phone

Description automatically generatedA screenshot of a phone

Description automatically generated

The constantly evolving technology and advantages from brand giants continue to widen the gap between medium to small businesses. Along with the growing gap amongst American markets the developing nations and 3rd world countries are even more fragmented and less technologically capable to keep up. This in itself leaves the door for more innovate solutions to marketing and PR for the market to tackle.

**References:**

*The Cost of a PR Disaster*. (2024). Shiftcomm.com.

<https://www.shiftcomm.com/thinking/cost-pr-disaster?form=MG0AV>3

*The top PR crises of 2023*. (2023, December 6). PRmoment.com.

<https://www.prmoment.com/pr-insight/the-top-pr-crises-of-2023?form=MG0AV3>

*What We Can Learn From 2023’s Top PR Crises*. (2023). Nextpr.com.

<https://www.nextpr.com/blog/what-we-can-learn-from-2023s-top-pr-crises?form=MG0AV3>