Training Backgrounder - Pre-Read

Background Information

Global Corporate Brand & Communications is eager to dive deeper into the world of Artificial Intelligence (AI). While ChatGPT and its "magical" ability to produce press releases, blogs and social posts has stolen the headlines, the real value for AI is the potential to change the workflow of communications and communicators. AI can offer a more structured process that ultimately delivers faster and higher-quality outcomes for internal and external customers. With that in mind, the Project Team has decided to focus the upcoming training case study on the following challenge question:

The Training Case Study Challenge

How might we integrate Artificial Intelligence into our communications and daily work to improve efficiency and effectiveness across the team?

Training Case Study Purpose and Goals

- **Case Study Purpose:** The training case study will allow you to apply a set of design thinking and creative problem tools and practices to a real challenge.
- **Learning Objective:** While producing innovative ideas is important, the top priority for this session is to practice and learn a set of innovation tools and skills.
- **Starter Ideas:** Beyond learning, the expectation is that as a team, we will generate a set of viable concepts that can improve the efficiency and effectiveness of the GCBC Team.

Artificial Intelligence 101

AI as a concept was birthed in 1956 at an event hosted at Dartmouth college in which top researchers from various fields were brought together to explore the notion of non-human, or artificial, intelligence. AI has come a long way since that conference. Today, AI has been described as the "New electricity." By 2024, over 60% of companies will have implemented AI tools into their operations. By 2030 it is estimated that global AI-related investments will account for more than $16 Trillion according to a recent study conducted by McKinsey & Co.

AI is generally grouped into two categories: narrow AI and general AI. Narrow AI are systems that are intended to handle a singular or limited task. A familiar example of narrow AI is Apple's Siri which expresses no self-awareness or genuine intelligence. Narrow AI operates within a pre-determined, pre-defined range, even if it appears to be much more sophisticated. General AI, or "Strong" AI, refers to machines that exhibit human intelligence. In other words, General AI can successfully perform any intellectual task that a human being can. In the future, it is expected that General AI will be able to reason, solve problems, make judgements under uncertainty, plan, learn, integrate prior knowledge in decision-making, and be creative. Most experts say we're still a decade or two away from achieving true general AI because of its complexity.

Machine Learning and AI

While AI mimics the ways that humans think to perform complex tasks. Machine learning (ML) is a subset of AI that uses algorithms trained on data to produce models that can perform such complex tasks. Today, most AI is performed using ML, so the two terms are often used synonymously, but AI actually refers to the general concept of creating human-like cognition using computer software and systems, while ML refers to only one method of doing so. ML is unique from traditional computer programming in that traditional programming is based on a very specific set of rules. In other words, the computer can only do what it has been programmed to do. ML is different in that it is fed a very large amount of data, the computer then formulates the rules in what is called a model. There are different types of ML, for example, supervised, where a human might provide some examples for the computer to memorize and develop rules around, akin to a teacher teaching a student. Or unsupervised, where the computer, via ML, develops its own data patterns with no associated examples. We see ML algorithms at work in our everyday. Netflix suggestions, Mint and Yelp are all powered with the same underlying technology. For example, the Netflix Recommendation Engine (NRE), is made up of algorithms which filter content based on each individual user profile. The engine filters over 3,000 titles at a time using 1,300 recommendation clusters based on user preferences.

Natural Language Process (NLP) and AI

NLP is a branch of AI which enables machines to understand the human language. Its goal is to build systems that can make sense of text and automatically perform tasks like translation, spell check, or topic classification. NLP works by essentially "cleaning" and organizing the data into a more logical format — for example, breaking down text into smaller semantic

units, or "tokens." From there, the system applies algorithms to the text in order to interpret it. The applications for pharma and healthcare are essentially boundless…but here's what they're doing right now: Improving Clinical Documentation, patient matching in trials, improving accuracy of patient diagnoses and much more.

Facial Recognition and AI

Facial recognition is an AI-based system built to identify a person from an image or video. This technology has been around for decades, but its usage has become more noticeable, and accessible, in the past few years as it now powers innovative solutions, such as personal photo applications and authentication for mobile devices. And with recent advancements, facial recognition is being used in the fields of advertising, healthcare, security, proctoring, airports, and many more. Facial recognition uses AI algorithms to detect human faces from the background. The algorithm typically starts by searching for human eyes, followed by eyebrows, nose, mouth, nostrils, and iris. Once all the facial features are captured, additional validations using large datasets containing both positive and negative images confirm that it is a human face. One interesting application of this form of AI was at the 2020 Olympics in Japan, in which security teams used it to validate approved guests and root out potential criminals.

Potential Applications of Artificial Intelligence on Corporate Communications

AI has the potential to have a significant impact on corporate communications. Below are a series of applications to corporate communications that have been proposed by leading AI experts:

- **Faster Content Creation:** Tools such as ChatGPT and Midjourney have disrupted the content creation process, increasing the speed at which new content is generated and published.
- **Thought Partnership:** AI can offer creative thought partnership by providing information sources, quotations and starter thoughts that can be quickly synthesized into effective communications.
- **Information Validation**: AI has the potential to inform corporate communications team members of inconsistencies and discrepancies for pressing issues. AI can also identify mistruths and deception.
- **Process Efficiency:** AI can be used in the automating of repetitive or mundane tasks, such as scheduling meetings, sending reminders and summarizing data.
- **Response Time:** AI will enable faster responses to crises, following preset parameters as part of human-centric contingency plans. AI bots can be programmed to assist crisis communication leaders – and they won't be swayed by emotions in heated crisis situations.
- **Delivery of Information:** AI can deliver news to targeted audiences (even microtarget audiences) in new and innovative ways using identity based parameters.
- **Reporting Metrics:** AI can deliver better metrics for corporate communications. There is the potential that the metrics that corporate communications teams will get a decade from now will be better than what today's marcom teams get from marketing automation services.