## Image Recognition with IBM Cloud Visual Recognition PHASE-1

## **Problem Definition:**

The "Emotion-aware Marketing Analysis" project aims to develop a system for businesses want to assess customer emotional responses to advertisements and products. Develop an emotion detection tool that can analyze facial expressions in focus group videos. This tool will provide insights into which ads evoke the desired emotions and help companies fine-tune their marketing strategies..

## **Design Thinking:**

- Data Collection: Gather videos or images of focus group participants reacting to advertisements. Ensure participants' consent and data privacy.
- Facial Expression Analysis: Use pre-trained facial expression recognition models or train a custom model. Analyze facial expressions in the collected data to detect emotions.
- Data Labeling: Label the collected data with the detected emotions (e.g., happy, sad, surprised).
- Data Analysis: Use data analysis tools to identify patterns and trends in emotional responses to different advertisements.
- Report Generation: Create reports or visualizations summarizing emotional reactions to specific ads. Provide insights to businesses for marketing strategy improvement.
- Privacy and Ethical Considerations: Ensure data privacy and anonymization of participant information. Comply with ethical guidelines for human subjects' research.
- Presentation: Present findings to businesses and marketing teams to inform decision-making.