



Bloggers Alliance

Association of Bloggers, Storytellers and Creators

Hand holding Bloggers on the road to success

ENHANCING BUSINESS PERFORMANCE WITH GENERATIVE AI



***Unnati Kohli - Technical Storyteller
Bloggers Alliance***

Copyright Page



Bloggers Alliance

Copyright © April 2023 by Unnati Kohli

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means electronic, mechanical, photocopying, recording, or otherwise without written permission from the author. The content has originally been published on the Community by NASSCOM Insights.

The e-book is only for free distribution and has no commercial purposes.

Every effort has been made to make this book as complete and as accurate as possible. The information provided is on an “as is” basis.

For any appreciation, criticism, or suggestion, please write to pgdm22unnati_k@mdi.ac.in or imunnatik@gmail.com.

Acknowledgments



Bloggers Alliance

I take this opportunity to express my heartfelt gratitude to all the below-mentioned people for their constant encouragement, able guidance, and support throughout the course of this series on Generative AI and compilation in the e-book. I sincerely thank everyone for their input and support throughout the completion of the e-book. Their sincerity, thoroughness, and perseverance have been a constant source of inspiration for me.

To **Dr. Amit Nagpal**, President @Bloggers Alliance

To **Devendra Jaiswal**, Co-Founder @Bloggers Alliance

To **Dr. Kiran Karnik**, Ex-President @NASSCOM, Padma Shree Awardee

To **Achyuta Ghosh**, Senior Director and Head of Insights @NASSCOM

To **Shagun Singh**, Marketing Consultant @NASSCOM

To the **NASSCOM Community**

To **Bloggers Alliance**

community

by **nasscom** insights

Foreword



Bloggers Alliance

Generative AI in general and ChatGPT

in particular is the hottest topic these days. It reflects the first quantum leap of AI technology. In fact, **CreativityTech** is one of my favorite topics. I had written a blog, “My Journey into Creativity Tech” in October 2019 on the NASSCOM community. Earlier I used to say that creativity is the foundation of all storytelling, branding, and heart-touching content. But today I need to revise my statement and say, “**CreativityTech** is the new foundation of all storytelling, branding, and heart-touching content.”

Knowledge of technology can make a creative person highly creative and help even a non-creative person create exciting things. While machines are learning 24X7, **we need to learn faster, and smarter and collaborate with machines wherever we can.** You might be wondering, “Are you saying to compete as well as collaborate with machines?” Yes. Right in my MBA days in 1995, I heard of the term cooptetion (cooperation + competition) and how competitors Sony & Panasonic were collaborating on a particular project. As individuals also, we need to learn to practice cooptetion now.

Unnati’s sincerity and dedication toward every task reflect in this eBook. The eBook is handy in terms of basic information (including links) to all popular tools and a list of Generative AI tools available currently. The eBook is very comprehensive with both summary of tools and a glossary available at the end. My best wishes to Unnati for the success of the eBook and gratitude to all people acknowledged by Unnati for their support in the project, especially the Community by NASSCOM Insights team.

Foreword



Bloggers Alliance

Unnati brings her rich insights to the eBook, gained from three plus years of experience at Tata Consultancy Services, management education at MDI Gurgaon, insights from NASSCOM team, and her zeal to learn all the time.

Every coin has two sides and so does Generative AI. While some people see a massive opportunity for human-machine collaboration, others see a threat to their jobs. Closing our eyes will not make the lion disappear and we need to prepare ourselves for an AI-driven world.

At Bloggers Alliance, ***we support Responsible and Ethical AI***, and the last chapter of the book reflects our philosophy.

We have completed four years on 13th April 2023 and this book is for free circulation as part of the fourth anniversary. Interestingly the theme for this year as shared by our Brand Ambassador Neha in her video is “**Connection. Collaboration and Co-Creation**”. This eBook not only reflects the theme but also intends to promote human-machine collaboration in the times ahead. Human-machine collaboration is going to take creative professionals and leaders (applying creativity) to a new high in the coming years.

But, we need to ask ourselves, “Are we ready for the new times? Are we ready to tell a new story?”



**Dr. Amit Nagpal,
President, Bloggers Alliance**

Table of Contents



Bloggers Alliance

Acknowledgments

Foreword

Chapter #1: Generative Artificial Intelligence

**Chapter #2: Creating Images With
Generative AI**

Chapter #3: Customizing Product Experience

**Chapter #4: Dealing With Languages Using
Generative AI**

Chapter #5: Tech Gamechangers Chatbots

**Chapter #6: Generative AI And Socio-
Cultural Implications**

Chapter #7: Epilogue

Glossary

About Bloggers Alliance

About the Author



CHAPTER 1

GENERATIVE ARTIFICIAL INTELLIGENCE

GENERATIVE AI –



Bloggers Alliance

According to MIT Technology Review, Generative AI is one of the most promising advances in the world of AI in the past decade.

Generative artificial intelligence (AI) describes algorithms that can be used to create new content, including audio, code, images, text, simulations, 3D objects, and videos.

It delivers innovative results without the biases of human experiences and thought processes.



The Global Generative AI Market Size accounted for USD 7.9 Billion in 2021 and is projected to

occupy a market size of USD 110.8 Billion by 2030 growing at a CAGR of 34.3% from 2022 to 2030.*

* Source: Acumen Research & Consulting

Generative AI Use Cases



Bloggers Alliance

- 1) Image Generation:**
Generate and edit images
- 2) Ad from Product Description:**
Converting a product description into an advertisement
- 3) Language Translation:**
Translating English into French, Spanish, etc
- 4) Q&A:**
Answering questions based on the existing knowledge
- 5) Sentence Completion:**
Suggesting phrases or words to complete sentences
- 6) Keywords:**
Extracting keywords from a block of text
- 7) Grammar Correction:**
Correcting sentences into standard English
- 8) Coding:**
Explaining codes or auto-completing the codes

The use cases from 1 to 6 are covered in the following chapters in detail. _____



CHAPTER 2

CREATING IMAGES WITH GENERATIVE AI

Image Generation and Synthesis



Bloggers Alliance



Look at the picture above, isn't it beautiful? Well, to let you know, this isn't any image downloaded from the internet or captured from space, neither it has been made by any artist. This image has been generated with the help of Generative AI. Yes, you read it right.

In this section, I will cover a few technical aspects of generative AI which are used in image generation along with some interesting tools which you can use for generating the images.

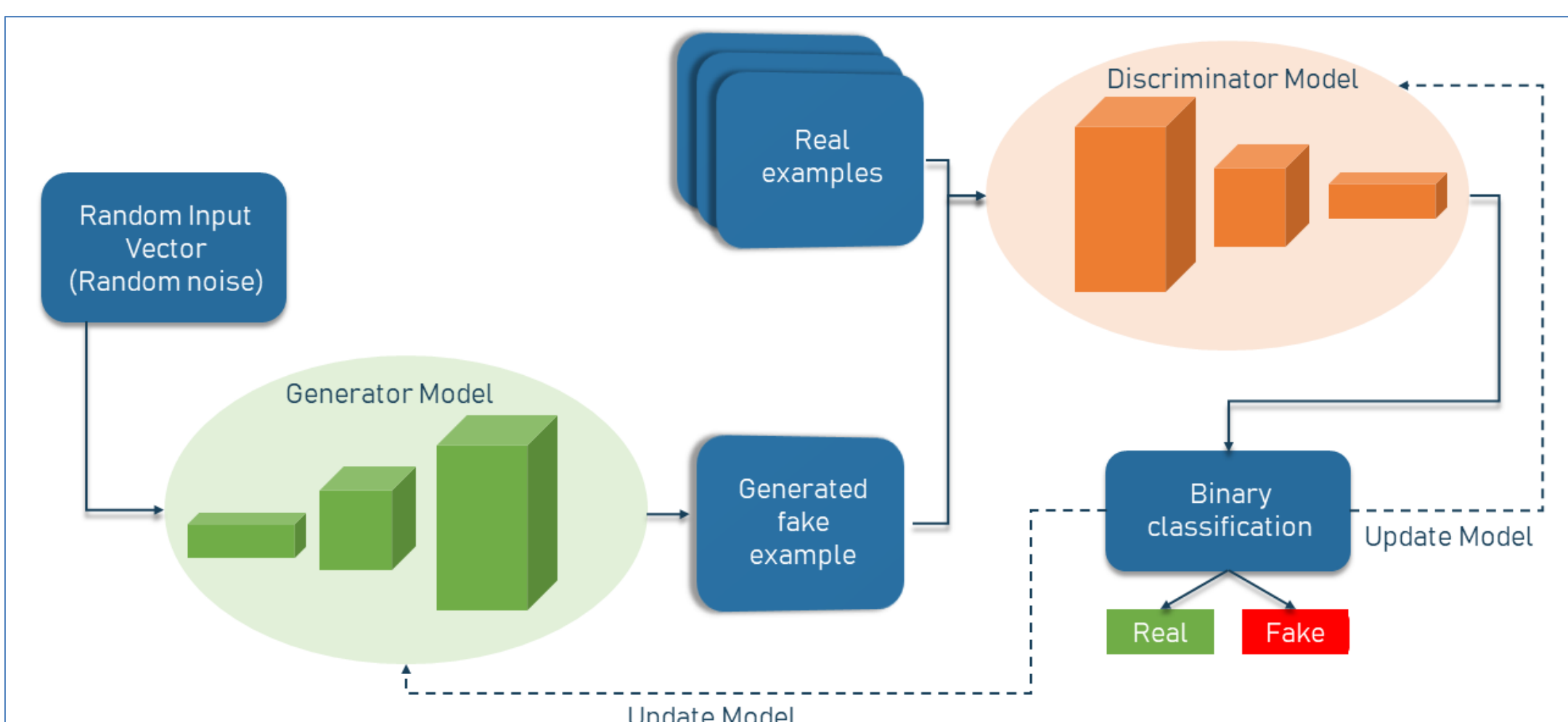
Generative Adversarial Networks (GANs)



Bloggers Alliance

The most important generative model is Generative Adversarial Networks (GANs). It has been first invented in 2014 by Jan Goodfellow and his colleagues at the University of Montreal. GAN is an *unsupervised machine-learning technique* that is used to discover patterns in the inputs and help generate similar outputs. It consists of 2 neural networks – **Generator** and **Discriminator**.

Look at the image below to understand it further.



Architecture of GAN Model *

* Source: AltexSoft

Generative Adversarial Networks (GANs)



Bloggers Alliance

Generator Block – It generates new images similar to the original images by taking noise as input

Discriminator Block – It takes both the inputs from the original dataset and generated images & then does a binary classification into real (1) or fake (0) images

The model is adversarial because both neural networks are against each other. The generator generates fake images and the discriminator bifurcates the same. The GAN will be considered successful once the generator block generates an image that is able to fool the discriminator block as a “real” image. But then the discriminator needs to update and learn as well. This is an iterative process to make the model more robust and versatile. Similarly, we have Variational autoencoder (VAE), Diffusion models, etc as generative models.

Image Generation Tools



Bloggers Alliance

Name of the tool	Description
<u>GoArt</u>	<ul style="list-style-type: none">• Changing the style of an original image• Used to create NFTs (Non-fungible Tokens) by transforming the original images into paintings which will provide ready-to-use NFTs within just a few clicks• <i>Free & Subscription based credits</i>
<u>DALL-E</u>	<ul style="list-style-type: none">• Conversion of text into images that uses a transformer language model which takes both images and text as a single stream of data• <i>Free & Subscription based credits</i>
<u>ImageNet</u>	<ul style="list-style-type: none">• Online database for multiple categories of images providing free data which can be used for non-commercial purposes• <i>Free Database</i>

Image Generation Tools



Bloggers Alliance

Name of the tool	Description
<u>GauGAN</u>	<ul style="list-style-type: none">• Model that takes semantic segmentation as input and converts sketches into real-life beautiful images as output• Converts text into images, for instance, you can type “mountains with a sunset” and it will generate different images• <i>Free Code Source Available</i>
<u>DeOdlify.ai</u>	<ul style="list-style-type: none">• Uses diffusion models to colorize the black-and-white images and provide amazing results• <i>Free signup & Premium Subscription Model</i>
<u>GLIDE</u>	<ul style="list-style-type: none">• Newest model for image generation built by OpenAI that is based on the diffusion model• <i>Free Code Source Available</i>



CHAPTER 3

CUSTOMIZING PRODUCT EXPERIENCE

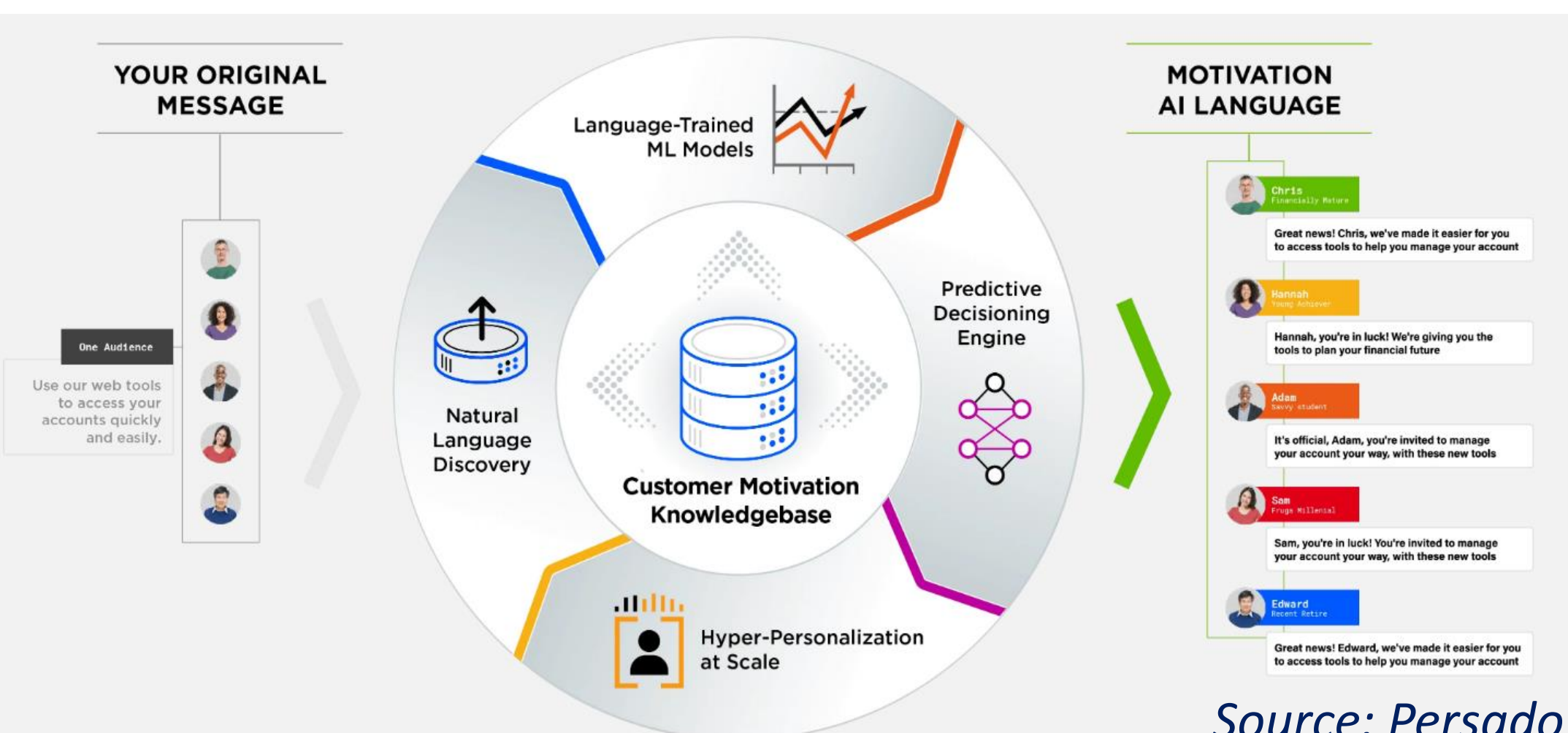


Bloggers Alliance

Product Customization using GenAI

Imagine you are a product-based company with lots of products. Rather than writing product descriptions for each of the products you sell and creating their advertisements, Generative AI can do that for you.

Usually, companies have a content marketing team or hire a professional copywriter to do that. However, it costs around \$40-50k per year for a copywriter. This is much more than an AI writing tool. There are multiple tools that can help you generate unique product ad lines, product descriptions, and keywords to enhance the outreach media campaigns.



Source: Persado

Product Customization using GenAI



Bloggers Alliance

Personalized Ads –

The Gen AI tool can help you generate customized advertisements for each individual customer, based on their interests and behaviors.

Synthetic Custom Video Messages –

This is an interesting way of customized advertising or customer engagement. The person in the video can address each customer individually by their names, and in their native languages. [See this project of PepsiCo](#) to understand it further where Lionel Messi addresses each of his fans.

Customizing Chatbots –

Traditional Chatbots are a thing of past now. Generative AI is making chatbots more customizable and interactive by utilizing external databases to enable answering complex queries and even escalating to human agents if needed. [Have a look at Bank of America's Erica](#) virtual assistant.

Detailed Product Descriptions –

Using just a few words, you can generate a detailed and impactful product description for different segments of customers or a different region. Try your hands on [Cohere.ai](#) to comprehend it.

Product Customization using GenAI



Bloggers Alliance

Example –

amazon

Amazon was a pioneer in providing individualized product suggestions using machine learning. Even so, the company has found it difficult to make these capabilities available to businesses that use Amazon Web Services for their websites.

The general release of [Amazon Personalize](#), which offers AWS users access to the same machine-learning technology as Amazon.com, was revealed by Amazon in June 2019.

Since the initial rollout, the Amazon team has improved its functionality to the point where Personalize can now provide up to 50% better suggestions across a range of quickly evolving product categories, such as books, movies, music, and news articles.

Marketing Focused GenAI Tools



Bloggers Alliance

Name of the tool	Description
Jasper.ai	<ul style="list-style-type: none">• Helps create tailored content including blogs, social media posts, catchy one-liners, sales emails, ads, art, websites, etc• Uses SEO Optimization, and provides Chrome Extension to enhance the user exp• <i>Free demo & Subscription based model available</i>
Signum.ai	<ul style="list-style-type: none">• AI-based ad campaign automation platform which launches personalized outreach campaigns based on customer behavior, prospect identification and sequence generation• <i>Free demo & Subscription based model available</i>
Persado	<ul style="list-style-type: none">• NLP-based platform allows to understand the users' preferences and generates content that best aligns

Marketing Focused GenAI Tools



Bloggers Alliance

Name of the tool	Description
	<ul style="list-style-type: none">with their language<i>Free Demo and subscription model</i>
<u>Skyword 360</u>	<ul style="list-style-type: none">Content marketing platform which allows creation of customized marketing strategy based on customer persona profiles<i>Paid subscription model available</i>
<u>Phrasee</u>	<ul style="list-style-type: none">Creates personalized customer journeys by generating, optimizing, automating, and analyzing language in real-timeDelivers the customized messages to the right people at the right time, and most importantly in the brand's unique voice<i>Free Demo and custom subscription model</i>



CHAPTER 4

DEALING WITH LANGUAGES USING GENERATIVE AI

Language Translation



Bloggers Alliance

“Translation is a creative, generative process which may result in many different translations which are all equally good (or bad).”

***- Christian Federmann
(Principal Research
Manager on Language
Translation, Microsoft)***

I will start this with a story. I was working at a firm as a Data Analyst. We got a project for a large *Spain-based telecommunication organization*. They had a *manual ticketing process* where the Network B2B team classified the tickets manually. Due to this, at times, the tickets got routed to the wrong teams. This impacted the overall SLAs and the quality of the resolution for their corporate customers. The ticket data was in form of conversations between the customer and the ticket agent. Since it was a Spain-based organization, the data was a mix of English, Spanish, and a couple of

Language Translation



Bloggers Alliance

other languages as sometimes the ticket gets routed through multiple countries for resolution. Moreover, it is quite common to see that many times the words do not exist in the other language.

For instance, it's very difficult to translate the **word "nice" into different languages.** "**Put**" cannot be translated into German. Portuguese call everything – bread, dough, cake mix, batter, and pastry – "massa". Not going far, let's just consider our rich Indian culture with multiple and diverse languages. The **Tamil language has 12 stages of flower** development starting from bud formation (Arumbu) until the appearance of withered fresh flowers (Pommal). Similarly, in Hindi, we have multiple words to express a single emotion.

We use "**Tum, Tu, and Aap**" in different contexts as per age group, and courtesy. However, in English, there is just one word

Language Translation



Bloggers Alliance

“You” to replace all three. Such things make translations even more complex.

The challenge we faced was during the translation of the data from multi-lingual to English as most of the Natural Language Processing (NLP) models work in English. Another challenge was the **context**. Machines do not understand in what context a person has written/spoken something while translating. Languages are complex, and words can have different meanings based on the situation they are used in. For example, the term “bank” can be used to describe either a financial institution or the river’s edge. Similarly, taking literal meanings for idioms can be different from the original meaning.

Another instance can be when the translation machine algorithm was applied at scale on **Meta’s platforms**. Facebook **mistranslated** a post by a Palestinian man

Language Translation



Bloggers Alliance

from “good morning” to “hurt them,” which led to his arrest by Israeli police. So, you can see that even a small number of errors can produce disastrous results.

This shows that machines lack the same level of cultural knowledge, understanding, and experience as human translators. However, with the advancement in the field of Generative AI, there have been few developments that are minimizing such challenges. Still, there is a long way to go in terms of improvement in accuracy and reducing the nuances of translations. This is very unlikely in the short term as accuracy requires specific domain training data, and terminology, which is currently not available on the world wide web data used to train ChatGPT.

Even though the machines cannot master the translation, they can be extremely helpful in automating and increasing the

Language Translation Tools



Bloggers Alliance

efficiency of translation processes. Below are some tools to help you realize that –

Name of the tool	Description
<u>Language Weaver</u>	<ul style="list-style-type: none">• Enterprise-level machine translation that enables global organizations to manage multilingual content and workflows in real-time at scale• Helps improve collaboration between teams, increase productivity, and go to market faster internationally.• <i>Free Demo and subscription model</i>
<u>Amazon Translate</u>	<ul style="list-style-type: none">• Neural machine translation service that delivers fast, high-quality, affordable, and customizable language translation• <i>Free Demo and custom subscription model</i>

Language Translation Tools



Bloggers Alliance

Name of the tool	Description
<u>Yandex Translate</u>	<ul style="list-style-type: none">• Platform that enables the translation of text or web pages in almost 100 languages.• Take inputs from documents, voice, images, and websites• <i>Free model available</i>
<u>Unbabel</u>	<ul style="list-style-type: none">• Language operations platform that facilitates effective cross-cultural client communication• Provide a consistent multilingual customer experience• <i>Free trial and free available along with a subscription model</i>



CHAPTER 5

TECH GAMECHANGERS CHATBOTS

Decoding the AI Wars



Bloggers Alliance

The rising surge of Artificial Intelligence, ChatBots, Intelligent machines, Brainy search engines, and so on introduced a wide range of tools enabling smarter and smoother conversations, enhancing customer experiences. However, the most celebrated tools are none other than ***Open AI's ChatGPT and Google's BARD.***

ChatGPT is an artificial intelligence chatbot developed by OpenAI and launched in November 2022. With the increased popularity, Microsoft finally acquired OpenAI's ChatGPT and decided to integrate it with Microsoft's search engine Bing in January '23.

Google then unveiled a similar AI technology BARD with the intention of competing ChatGPT in February '23. ChatGPT indeed had the first-mover advantage. It made it public while Google's BARD was still in the beta phase.



Decoding the AI Wars



Bloggers Alliance

Since ChatGPT works on the **Generative Pre-trained Transformer 3 (GPT-3) technology**, hence it was named ChatGPT whereas, Bard gets its name from the word meaning “**poet**” — as in the Bard of Avalon, William Shakespeare — in a reference to its **linguistic capabilities**.

Bing ChatGPT vs Google BARD



	Bing ChatGPT 	Google BARD 
Launched	January '23	February '23
Owned By	Microsoft, OpenAI	Google
About	AI-based chatbot ChatGPT that can automatically generate human-written text unexpectedly and accurately combined with Bing AI which provide users with the most relevant and popular search results from the web to offer them easy access to high-quality content created by top publishers	Generative conversation service provider that is designed to work together with Search, thus providing premium-quality results and responses to visitors. It provides easy-to-navigate sidebars that can scan different web pages and generate summaries based on users' queries.
Technology Used	Generative Pre-trained Transformer 3 (GPT-3)	Language Model for Dialogue Applications (LaMDA)

Decoding the AI Wars



Bloggers Alliance

Bing ChatGPT vs Google BARD

	Bing ChatGPT 	Google BARD 
Benefits	Covers a wide range of use cases. It can generate text to write news articles, fiction poetry, product descriptions, blog posts and more. It can also handle certain coding languages, allowing it to even provide the code required to build a basic website.	BARD is best used for research, as it takes traditional search queries and answers them in a conversational manner, providing context rather than raw results
Integration Capabilities	ChatGPT is integrated with Bing, Edge and, Teams. It will be integrated with Opera web browser too.	BARD is integrated with Google search. Might be integrated with Lens and Maps.
Disadvantages	Sometimes, can provide inaccurate or inappropriate information. The information it pulls can be incorrect or biased and the chatbot is not inherently trained to know.	Sometimes, can provide inaccurate or inappropriate information. The information it pulls can be incorrect or biased and the chatbot is not inherently trained to know.
Pricing Model	1) Free on OpenAI's site as a research preview 2) ChatGPT Plus (ChatGPT 4) - subscription model of \$20	Currently has only the free model available to "trusted testers"

Decoding the AI Wars



Bloggers Alliance

The table summarizes Bing ChatGPT vs Google BARD. We can clearly see that ChatGPT caters to more range of applications as compared with Google BARD.

Google BARD does not include a built-in plagiarism detector as ChatGPT does, but Google Bard does not yet have all of ChatGPT's creative uses.

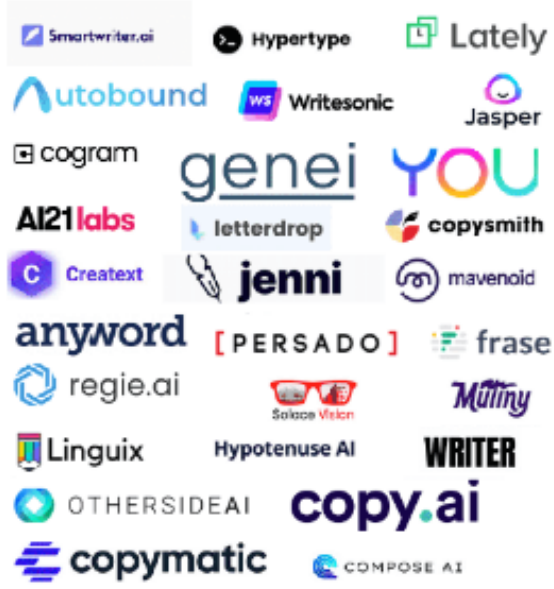
Although ChatGPT seems ahead at the moment, Google has never taken any competition lightly. It will be interesting to see how these two players advance and how other players may expand in this area.

Spectrum of GenAI Tools

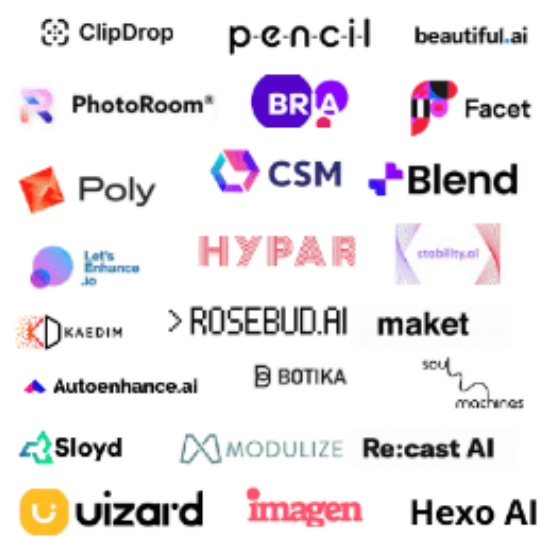


Bloggers Alliance

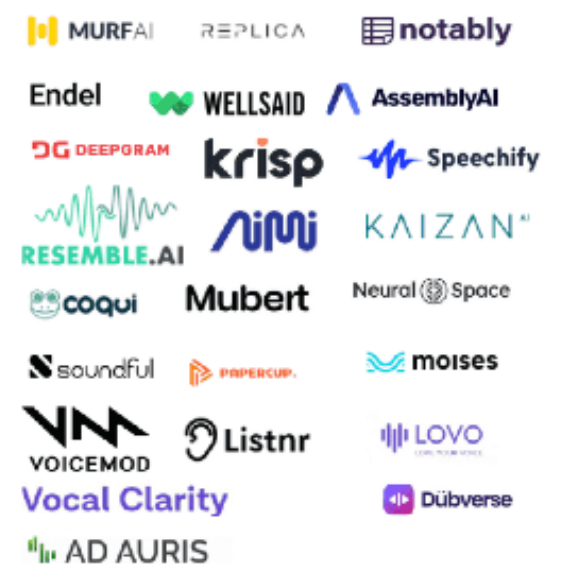
TEXT



IMAGE



AUDIO



CODE



CHATBOTS



VIDEO



ML PLATFORMS



SEARCH



GAMING



DATA



Another list by Antler provides field/category-wise details of different companies in the Gen-AI Landscape.

Source: Antler



CHAPTER 6

GENERATIVE AI AND SOCIO- CULTURAL IMPLICATIONS

Working with GenAI Ethically



Bloggers Alliance

“AI is likely to be either the best or worst thing to happen to humanity”

- Stephen Hawking

Humans are an adventurous species, unlike AI which has both assets and liabilities. If it falls into the wrong hands, it may turn into the greatest misadventure of humanity. Whatever the technology, it has both positive and negative uses. Generative AI is obviously not an exception. Currently, there are a few obstacles to overcome.

Deep Fake Technology

Starting with the deep fake technology which was initially developed for amusement. However, it already has a negative image. Through a few software, deep fakes are openly accessible to all users. They have been used for both malicious and amusing purposes.

Working with GenAI Ethically



Bloggers Alliance

For instance, a hacker broadcast a deep fake video of Ukrainian President Volodymyr Zelensky ordering his people to surrender in March 2022 on hacked Ukrainian news. Even though the video's fakeness was obvious to everyone, it spread on social media and was heavily manipulated.

Copyright & Consent

Few artists have sued OpenAI, Stability AI, and Midjourney, claiming that the three "Cs" of copyright—consent, compensation, and credit—have been violated. According to them, the AI engines use the original content as training data without the consent of the artists. Yet, modern copyright laws include fair-use clauses that specifically permit artists who have adequately altered a previously created work of art to be exempt from accusations that the resulting transformed work is infringing.

Additionally, the training data being used

Working with GenAI Ethically



Bloggers Alliance

may be biased which generates biased results using GenAI.

Control & Safeguard

GenAI is also hard to control. This doesn't mean that machines will turn against people and end the world. We are actually fairly good at it, let us face it. However, since generative AI is capable of self-learning, it is challenging to manage its behavior. The results can frequently be very different from what you anticipated.

But as we all know, without obstacles, technology could not advance and expand. The global AI market is expected to surpass \$500 billion in 2023. As AI adoption expands, ethical compliance remains a significant challenge. Additionally, breakthroughs like generative AI have drawbacks that can be avoided or greatly reduced, thanks to techniques like **Responsible AI (RAI)**.

Working with GenAI Ethically



Bloggers Alliance

This helps us understand how and where to draw the line.

"AI will enable social transformation at scale only if the developers and adopters of this disruptive technology demonstrate an unwavering commitment to user trust and safety."

*- Ankit Bose, Head of AI,
Nasscom*

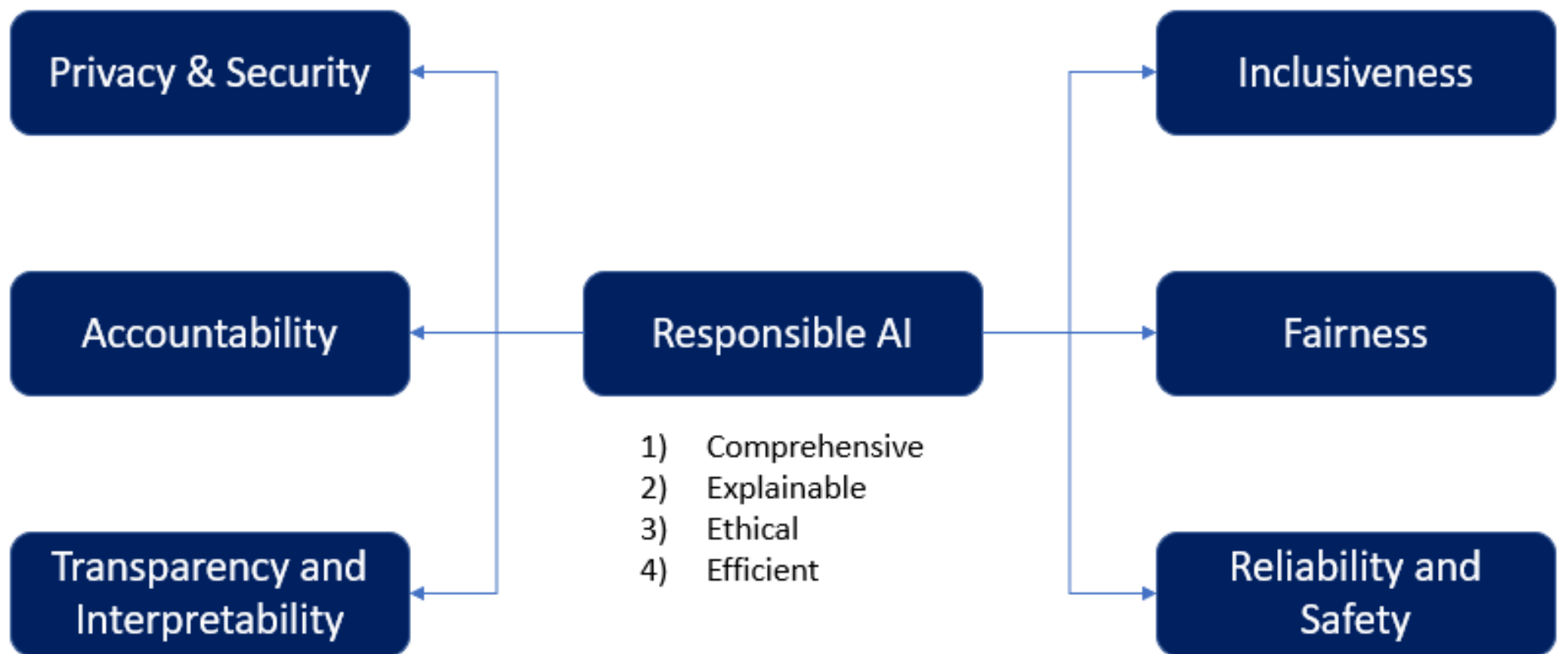
Responsible AI adoption could enable businesses to address rising trust and safety concerns around AI.

The Australian government is planning the creation of an AI Safety Commissioner to support regulators, policymakers, government, and businesses in applying laws and other standards for AI-informed decision-making. He/she will help government agencies and the private sector how to develop and use AI lawfully, ethically, and in conformity with human rights.

Working with GenAI Ethically



Bloggers Alliance



These are the principles and practices of Responsible AI which helps any business to run ethically and address the challenges while dealing with Artificial Intelligence.

Over 1400 leaders and researchers in the industry recently signed an ***open AI Moratorium Letter*** urging all AI labs to pause the training of AI systems more powerful than GPT-4 for at least six months. This has been controversial as one side views foundation AI models as analogous to nuclear weapons that could cause enormous harm. Another sees it as a

Working with GenAI Ethically

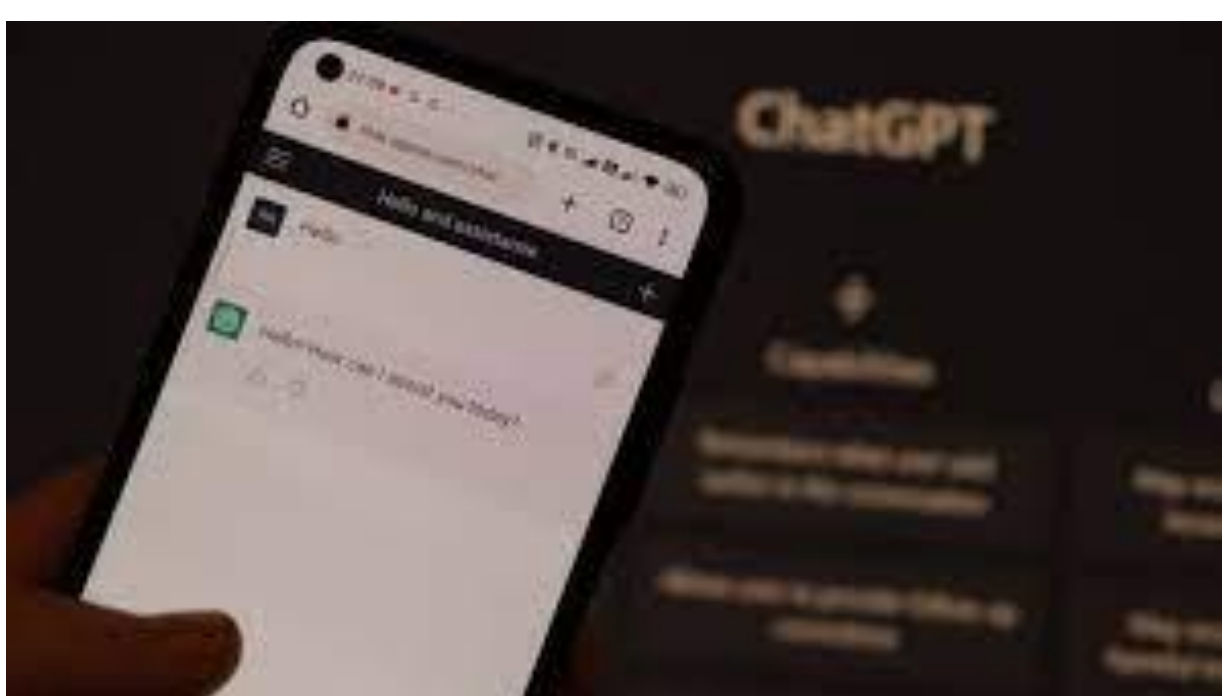
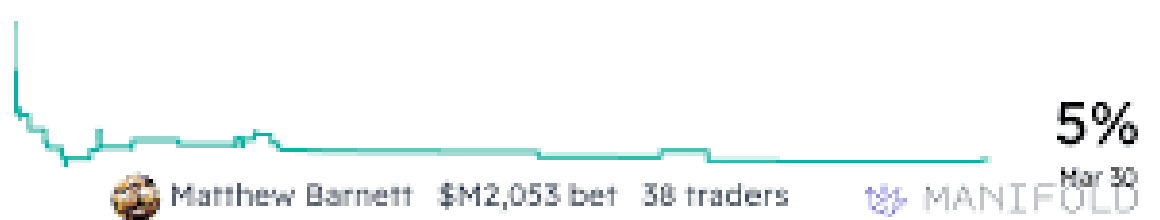


Bloggers Alliance

moratorium on AI development compared to restrictions that were once placed on technologies like the printing press, the telegraph, or electricity that enabled enormous advancements and created enormous wealth, improving the quality of life for generations. Not only this, but people see it as **“Human-Machine Collaboration”**, for instance, LinkedIn has



Will it be verified that Sam Altman signed the AI moratorium open letter before April 5th, 2023?



Working with GenAI Ethically



Bloggers Alliance

started writing collaborative articles using Artificial Intelligence.

Nevertheless, let's wait and see how things change and advance.

“We’re at the beginning of a golden age of AI. Recent advancements have already led to inventions that previously lived in the realm of science fiction – and we’ve only scratched the surface of what’s possible.”

- Jeff Bezos

Concluding with a brief **interview of Dr. Kiran Karnik** on the ethical usage of Generative AI and other advanced technologies, along with an interesting read on [Generative AI risks and countermeasures for businesses.](#)

About Dr. Kiran Karnik



Bloggers Alliance



Dr. Kiran Karnik is a prominent Indian administrator chiefly known for his work in the broadcasting and outsourcing industries. He has formerly been the president of NASSCOM (The National Association of Software and Services Companies), and is now one of its trustees.

He also served as a director in the Central board of directors of the Reserve Bank of India. He is also the chairman, of the board of directors, of the Indraprastha Institute of Information Technology, Delhi (IIIT-D). He is a public policy analyst and author.

He is a regular columnist with national newspapers, including the Economic Times.

Books –

- ***Decisive Decade: India 2030, Gazelle or Hippo***
- ***The Coalition of Competitors: The Story of NASSCOM and the IT Industry***

Dr. Karnik Speaks...



Bloggers Alliance

Ques. Since tools like ChatGPT learns from the existing large data including blog posts, articles, essays, etc, so do you think using GenAI introduces potential biases like gender stereotyping, etc? Is there any mechanism to minimize those biases?

Ans: This is a definite danger, especially as GPT sweeps the world and new apps ride on it. The “training” depends on data sets and, therefore, necessarily uses a majority of “Western” content, thus automatically introducing an (unintended) bias and a certain perspective. Given the skew in content creators (even in the West), there is also obviously a gender bias/perspective. The same is true of the underlying software. Correcting these will be very difficult. The practical solution is to be deeply aware of the biases. Maybe, at some point, AI will evolve to also automatically correct these!

Also, as the percentage of content creation from non-Western countries (particularly India and China) increases, and AI/GPT becomes more language-agnostic, there will be some corrective

Dr. Karnik Speaks...



Bloggers Alliance

on one aspect – but (at least in the short run), the gender bias may well get more pronounced. The same is true for the economic perspective (better-off vs. disadvantaged) given the vast inequity and the fact that content creators are overwhelmingly from the upper classes.

Ques. Amid growing global concerns around the digital world, Australia is planning to appoint a dedicated AI Safety Commissioner and will become the first country among the G20 nations to have such a dedicated profile for AI. What kind of policies or regulations can be introduced by the Government of India to channel the digital world?

Ans: It is increasingly clear that some form of regulation is necessary, may be inevitable. Many – including some tech leaders themselves (like Elon Musk) – have called for this. Some (like Nobel Laureate Stephen Hawking) even consider AI as an “existential threat”. With ever-greater sophistication, AI is becoming more autonomous. I like to give the example of cars. Today, with greater automation, a lot of functions are handled by software/AI – generally

Dr. Karnik Speaks...



Bloggers Alliance

with a manual over-ride in-built. In days to come, we may have humans driving (for the pleasure of it), but a robotic over-ride. The reason is that the reaction time (say, to an on-coming vehicle or a pedestrian suddenly coming in front of the car) of humans is slower than that of future AI. Thus, at a conceptual level, one may say that the **machine takes charge and AI – not a human – is the decision maker**. This has deep philosophical implications, but also legal ones. Clearly, then, a new regulatory framework is required.

Further, given that digital technologies (ICT, in general) are not geography bound, there will be a need for international coordination. As AI facilitates cross-border cyber attacks and cybercrime, there is a need for **international laws** which all countries respect. This will be no easy task. However, there is a need to recognize that with all the new developments in AI, cyberspace – like climate change – is now a global issue that can affect all. One might even say that this is an issue for the human species itself.

Yet, there is a concern. Regulation by the

Dr. Karnik Speaks...



Bloggers Alliance

government is capable of misuse, particularly for suppression of dissent. For long, the Net was visualized as an arena of freedom: a place where a single individual could make his/her voice heard by millions across the world. Unfortunately, the early hopes have been dashed: first, by the overload of information and so the consequent emergence of platforms that began to prioritize (and, sometimes, remove) content – becoming the new gate-keepers - and now by organized groups (from trolls to hate-mongers). The possibility of fake news and hate speech translating to violence on the ground has been a justification for State intervention. This, as we know from experience, can be **positive and benign, or a means of control and suppression of any dissent.** Where the balance lies is difficult to say. Or can we find a new way? As in many other areas, will tech itself (that created the problem) help to also solve it?

Ques. “AI will not replace you. A person using AI will.” What are your views on this statement?

Ans: In the short run, definitely so. In the long run, maybe not: as mentioned autonomous,

Dr. Karnik Speaks...



Bloggers Alliance

“thinking”, even **sentient AI** may emerge in the years (decades, one hopes) ahead.

Yet, as I have said, our best hope may be a

Man + Machine

AI + Human Combination

which combines



**Human “stupidity” with Artificial/
Machine Intelligence**

Ques. What social implications does AI have on businesses today and how do techniques like Responsible AI (RAI) empower them to trust and scale AI with confidence?

Ans: The immense impact of AI (including its biases) – often unintended consequences - calls for businesses to use it responsibly.

Responsible AI needs a **strong ethical foundation within the business**. In promoting this, **consumer awareness and education** (both by industry and government; also, importantly, by educational institutes) have a big role to play. Just as sustainability is increasingly being demanded by consumers (and is, therefore, “**enlightened self-interest**” for business),

Dr. Karnik Speaks...



Bloggers Alliance

responsible AI should become a consumer preference. This, and the resulting impact on market valuation, will be a driver and catalyst for businesses to adopt it.

Ques. Any final piece of advice for the young minds on how to ethically use AI or anything else you would like to share?

Ans:

- ✓ Be a conscious consumer: give preference to products that use AI responsibly.
- ✓ Make sure that AI solutions/apps/uses are within an ethical/RAI framework.
- ✓ Don't spread fake news, unverified stories, and rumors. Don't blindly forward things that are hateful and divisive.
- ✓ Your own future, and that of all humans, depends on creativity, curiosity, and innovation. Focus on these and help to promote these abilities in others in whatever way you can.
- ✓ Learn to work in teams – not only with diverse humans but also in partnership with machines.



CHAPTER 7

EPILOGUE

Tools Summary



Bloggers Alliance

The below table summarizes different tools for different use cases we read in this book and some more –

Use Case	Tools
1) Image Generation / Visual Content	<ul style="list-style-type: none">• GoArt• DALL-E• DeOldify.ai• GLIDE
2) Customized Text Creation	<ul style="list-style-type: none">• Jasper.ai• Signum.ai• Persado• Phrasee• Skyword 360
3) Language Translation / Curation	<ul style="list-style-type: none">• Unbabel• Yandex Translate• Language Weaver• Amazon Translate
4) Sound / Audio Generation	<ul style="list-style-type: none">• Listnr• Speechify• Moises• Resemble.ai
5) Video Creation	<ul style="list-style-type: none">• Steve AI• Basch.io• Yepic AI
6) Podcasts	<ul style="list-style-type: none">• Ad Auris



GLOSSARY



Bloggers Alliance

Artificial Intelligence (AI):

Artificial intelligence is created by programming machines to think and learn similarly to people.

Chatbots:

A user-friendly interface that enables queries and responses.

Generative Pre-trained Transformer (GPT):

A kind of deep learning model that was trained on a sizable dataset to produce text that resembles human speech.

ChatGPT:

An interface for conversation was created using GPT-3.5. The OpenAI-developed GPT-3.5 large language model is trained on a sizable quantity of internet text data and fine-tuned to handle a variety of natural language tasks.

GPT-3:

The third version in the GPT-n line is designated as GPT-3. It has 175 billion factors, or tunable knobs, with weights for forecasting.



Bloggers Alliance

Discriminative Models:

Models that categorize a sample of data and forecast a label.

Generative Models:

Models that produce new data by identifying trends in training and input data.

Conversational AI:

A branch of artificial intelligence that concentrates on creating machines that can converse and understand human-like language.

OpenAI:

OpenAI is the company that created ChatGPT. A research organization called OpenAI seeks to properly develop and advance friendly AI.

Neural Network:

A layer-based, network-based machine learning model influenced by the organization and operation of the human brain.



Bloggers Alliance

Large Language Model (LLM):

A kind of deep learning model developed to perform tasks

requiring the comprehension and generation of natural language. There are numerous well-known LLMs, including BERT, PaLM, GPT-2, GPT-3, and GPT-3.5.

About Bloggers Alliance



Bloggers Alliance

Bloggers Alliance is a not-for-profit society, registered under Haryana Registration and Regulation of Societies Act, 2012 (Regn No 03256). Bloggers Alliance is to empower bloggers in becoming national and global influencers and changemakers by supporting them in optimizing the power of blogging.

Bloggers Alliance aims to serve the blogging community by providing training, coaching, networking, branding, and other opportunities required for professional success and support them in creating social change.

About The Author



Bloggers Alliance



Unnati Kohli

(<https://www.linkedin.com/in/unnatikohli/>)

About



MDI
GURGAON

Management
Development
Institute

Unnati Kohli is currently pursuing

the flagship PGDM program at MDI – Gurgaon (2022-24). She will be doing her Summer Internship with Deloitte USI as an Associate Consultant in Strategy & Analytics.



Bloggers Alliance

She is also working as a Technical Storyteller with Bloggers Alliance.



TATA
CONSULTANCY
SERVICES

Prior to this, she has 37 months of work experience as a Data Analyst in TCS in Telecom Network Domain.

Areas of Interest

Machine Learning, Artificial Intelligence, Metaverse, Telecommunications

Hobbies

Reading, Yoga, Lawn Tennis, Binge Watching



Bloggers Alliance

THANK YOU